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This 52-week Tuskegee Institute project, undertaken in 1964 to train a sample of culturally deprived male heads of households in Alabama, included vocational skills (brickmasonry, carpentry, farm machinery, and meat processing), academic skills (mathematics, English, and remedial reading), group, individual, and family counseling, medical care, and job development, placement, and followup services. Fifty percent of the trainees lived on campus while the others commuted. Intensive teaching and counseling were needed since most trainees were functioning at or below the eighth grade level and were being brought into a basically alien environment. The trainees, almost all aged 21-50, were grouped by learning potential, and special academic courses were designed for each skill. Lectures, films, and field trips were also provided. Trainee autobiographies, class day and graduation activities, exhibits, participation in high school equivalency examinations, and the job placement rate (121 out of 166 by September 1965) were generally indicative of program success. Resident trainees performed significantly better, had less absenteeism and fewer personal problems, and showed more regard for personal characteristics, than nonresidents. (ly)

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Sep 68

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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DEMONSTRATIONAL FEATURES

of

The Tuskegee Institute Retraining Project

VOLUME I

SEPTEMBER 1, 1965

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PREFACE

Tuskegee Institute has conducted vocational and technical training programs since 1881. Traditionally, this work has been offered as a part of our regular college curriculum; however, we take pride also in our current involvement with research aimed at examining the obstacles to gainful employment of adults who have been deprived of opportunities to complete a high school course.

Pockets of unemployment, once flaccid, have now become firm and chronic in some areas of the nation. Prompt, effective and enduring corrective action must be taken or this festering blight will grow and further consume--or, at least, cripple--the vitality of the nation. No domestic problem of our time possesses a greater potential danger to the economic security of our nation than does that of mass chronic unemployment.

At Tuskegee, we are happy to join in an effort to wipe out the pockets of unemployment that plague the South and indeed the nation.

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I. INTRODUCTION

In the spring of 1964, on the dusty roads of rural Alabama, men sat hoping for welfare checks. Some hitched a plow to an old mule and attempted to start a garden that might feed their families during the long hot summer--if only the rains would come. Still others hitched rides or walked to a nearby logging center or foundry where they were hired for the day. Long hours, hard labor and low wages along with blighted hopes had brought despair to these once young and hopeful faces. This despair flowed from "long years of deprivation, degradation and discrimination which attacked their dignity and assaulted their ability to produce for their families."

For no single group of workers in the American economic society has been more drastically affected by automation and technological advancements than the southern rural farmers. The manual skills possessed by these workers have become obsolete and displaced by modern mechanical devices and scientific knowledge and practices. Educationally, socially and culturally deprived, in addition, these rural southern workers find themselves unprepared intellectually, psychologically, and emotionally to pursue the occupation of profitable farming or to enter other occupations available to adequately prepared adults.

Unemployment for this group in America is not self-corrective and yet, almost no special efforts had been directed to correcting the problem. One of America's most important challenges in the years ahead is to attack this massive problem of surplus manpower, inadequate education and conditions for both income and living that are substandard in rural areas. The problem works like a vicious cycle. Lack of economic resources has kept rural areas from providing educational, health, and other public services necessary to develop the skills and talents of its citizens. And because the lack of skills has kept earning power low, rural areas have been unable to accumulate the resources they need. How then, can America help people in rural areas move into the mainstream of economic progress?

Our public policies for rural America have been too heavily weighted in favor of investment in real estate, or plants and animals as compared with investment in human development. It is now realized that we must shift emphasis toward greater investment in people; it is the moral and educational fiber of a nation that contributes greatly to a nation's strength and wealth.

In the words of Booker T. Washington, "There is no defense of security for any of us except in the highest intelligence and development of all."

Just as a chain is no stronger than its weakest link; a group, race, or nation cannot feel any more secure than the members that make up that society. The nation that educates and develops its people to their highest capabilities will, in the long run, have a strong and enduring foundation for its security.

But the wheels turn slowly, so, in seeking to solve their own problems, increasing numbers of unskilled, undereducated rural workers are locating in urban areas though almost entirely unequipped to deal with the problems of urban industrial life. Too many farm people uprooted by technological change, particularly the poorly educated, find that migration has meant exchanging poverty in the country for poverty in the city.

Migration has also meant that many rural areas have been stripped of their younger, best educated, and most productive citizens. This loss of human resources and potential leadership seriously weakens rural institutions. Obviously, then, we cannot look to migration to solve the ills of rural areas.

Being situated in the Deep South and recognizing the problems surrounding it, Tuskegee Institute (in the true tradition of its founder, who "lifted the veil of ignorance from his people and pointed the way to progress through education and industry,") sought to develop and test a system of education which would help rural workers in the Deep South overcome their intellectual deficiencies, personal and social inadequacies, emotional instability and poor motivation which have long been obstacles to their adequate employment.

Therefore, Tuskegee Institute in cooperation with the United States Department of Labor through its Office of Manpower, Automation, and Training, and the Department of Health, Education and Welfare initiated a retraining program in 1964. It proposed to integrate training in technical skills (brickmasonry, carpentry, farm machinery repair and maintenance, and meat processing) with general education in communication and number skills and intensive counseling in personal habits, human relations and vocational guidance. It sought to demonstrate that the low income or hard-core unemployed rural heads of households can benefit when specialized efforts are made to find, select, evaluate, counsel, train and place them on jobs. It sought also to prove that vocational, educational and personal counseling will aid in eliminating the basic causes of unemployability.

Time being a factor (12 months duration) this retraining program had to devise means of accelerating the rate of producing employable adults from the ranks of persons who normally may have been excluded from retraining programs by tests commonly used by the employment service. This meant an intensified program.

The project was planned as a three phase operation: (1) recruitment, (2) basic education and occupational training, and (3) locating job opportunities and placing participants in employment. Out of these operations valuable research was to be developed which would give greater insight and direction to the training of functionally illiterate adults who were either unemployed or underemployed. The project was, therefore, "An Experimental and Demonstration Project."

Here was the chance for another beginning for which these rural workers had almost given up hope. For even in despair, there is always that dream of things becoming better.

How then, could we find, select and evaluate the persons who would most benefit from this program? Let us look for a moment at the recruitment phase of the program.

II. RECRUITMENT AND ARRIVAL

Announcements of the program were made on a state-wide basis. Through local employment offices, radio and newspapers; through County Extension Agents, Vocational Teachers, High School Principals and Ministers, words of hope echoed over the hills of Alabama. Slowly, a few men responded. They were told of scheduled meetings with interviewers at pre-arranged centers.

In accordance with the schedule, applicants were interviewed and counseled. However, an analysis of the data revealed that the functionally illiterate persons in whom we were most interested were not present to any appreciable extent.

At this point, Mr. Daniel Schulder and Mr. Larry Houston of the Office of Manpower, Automation, and Training, visited the Tuskegee Institute Project. They expressed considerable concern and interest in our locating more of the people in the older age brackets with fewer years of schooling. Because this group did not respond to the initial efforts to contact them, we decided to take a more detailed look at the 1960 Census data relative to the general lack of education among non-white rural males.

The 1960 Census had indicated a large number of functionally illiterate persons in these communities. Of the 22,702 rural non-white farm males in Alabama in 1960, 17,786 or 78 per cent had completed six years or less of schooling. Of the 17,786, 22 per cent, or 4,910 were at that time in the age bracket of 25-44. This group now makes up the older people, ages 30-50, which we were seeking to attract. Where were they? Why had they not shown up? How could we attract those to whom despair had produced an "indifference to learning." The call came loud and clear as if to say "wake up! A wonderful opportunity awaits." Still none came.

A special effort was made to encourage local leadership to assist in locating and motivating the large numbers of unemployed heads of households to, at least, appear. There was a "door-to-door campaign." After about six weeks, the interviewers returned to the recruitment centers to meet additional applicants. At this time, much data were collected during the interview sessions, then tabulated and analyzed for further study. A total of 721 applicants were seen.

As a pebble tossed into a pond makes ripples that spread into ever widening circles, so the call for this second chance in life--this new opportunity had spread to every hamlet and town, high road and by-road until finally, men heard and men came--men whose strength of character had been finely chiseled by hardship and self-sacrifice--men who may not have been able to read a written page but to whom LIFE had taught lessons yet unlearned by many of the educated--men who loved their families and wanted to work so their children could have opportunities they had been denied--men who had had little of the material things of life yet were willing and ever ready to share that which they had with some less fortunate. The concern these men had for the welfare of others and not just their individual welfare was demonstrated many times during the year. Early in the year, one of the trainees with eleven children lost his wife. In less than an hour a sizeable purse had been collected and offered as a symbol of sympathy and understanding. Another time, the home of one of the trainees was burned to the ground. All rallied to his support and presented him with boxes of clothes, house furnishings and food. In several illnesses that occurred, many blood donors stood ready and willing to give of themselves to help others. These were the individuals with whom the teachers were privileged to work for the year, 1964-65.

As the applicants arrived at the interview centers, it was interesting to note how apprehensive they were. Because of past disappointments and failures, some couldn't believe that this could be an exception. As one applicant approached with the County Agent who had brought him, he sat down with a resigned attitude and asked, "What's the trick to all of this?" He was defensive and evasive, showing a sensitivity to his condition. When asked to read a short passage, he looked at it a minute and replied, "I left my glasses at home; can I read this tomorrow?" Further discussion, however, brought out that he could neither read nor write which apparently was embarrassing to him. In spite of this, he had supported his family by driving a truck from his home to Atlanta for the past seven years. His employer had never guessed that he couldn't read because in all that time he had gotten lost just once when he missed one of the landmarks by which he made his way.

Another elderly and rather industrious looking applicant professed to have completed the fifth grade. Further testing, however, showed that he was reading at 1.9 grade level. He spoke proudly of having always taken care of his fourteen children---one of whom finished high school. "We ain't never been hungry. We's always had plenty of room and the clothes we need. Now there's twenty-one living in my home; eleven of 'em is grandchildren." This applicant was clean and neatly dressed, jovial and cooperative. Besides running his own farm on which he had chickens, hogs, and cattle, he worked part time as a carpenter's helper, barber, and blacksmith---trades which he "jest picked up."

Because of the large number of applicants from which only 180 could be selected, certain criteria of eligibility had to be formulated. They were:

1. Unemployed or underemployed (net income $1,200 or less per year).
2. Ages 19 to 50.
3. Legal or established resident of Alabama.
4. Head of household, head of family, or member of family whose head was unemployed or underemployed.
5. Generally inadequate education--functional literacy level at or below eighth grade level.
6. Desire to learn a trade and willingness to abide by all of the provisions of this program.

In addition, of the 180 persons who were accepted, 80 were to live on the campus and be fully exposed to the influence of a college campus with access to all of its facilities (library, recreation, entertainment courses, etc.) and the rest were to commute each day within a radius of fifty miles of Tuskegee. These, of course, would have a much more limited exposure to campus life. This program was to be essentially free of cost to the participants. Financial assistance was provided in accordance with the following schedule:

1. Those who lived within a radius of fifteen miles of Tuskegee Institute were to receive a training allowance of $26 per week and no travel allowance.

2. Those who lived within a radius of fifty miles but not closer than fifteen miles were to receive a training allowance of $26 per week and a travel allowance not to exceed public bus fare round trip daily. Further, the travel allowance would not exceed 10 cents per mile nor $5 per day--whichever was less.

3. Those participants whose legal residence was within the State of Alabama, but outside the fifty mile radius of Tuskegee Institute would live on the campus in college dormitories just as college students. They would receive a training allowance of $26 per week and a subsistence allowance of $35 per week. They would pay their room, board and laundry at the rate of about $60 per month out of the subsistence allowance.

With these criteria established, the data from interviews and applications were analyzed and showed that of the 721 applicants, 395 were heads of households and 326 were not. The ages of those who were heads of households are given in Table 1.

Table 1

Age Range of MDTA Applicants

Age	16-20	21-30	31-40	41-50	51-60	Total
Number	5	174	111	102	3	395

The number of years of schooling for each applicant was also obtained during the interview--but no attempt was made to verify this information. This information is given in Table 2.

Table 2

Number of Years of School Attendance

Schooling	1	2	3	4	5	6	7	8	9	10	11	12	12+	Total
Number	1	4	1	10	18	27	33	40	43	35	49	139	4	395

At this point, it was decided to screen the eligible applicants.

On April 8, 9, and 10, Dr. Harold Wolff of the Jewish Employment and Vocational Service, St. Louis, Missouri, visited the Tuskegee Project for the specific purpose of assisting the research team with the development and selection of achievement and aptitude tests. It was concluded that the Wechsler Adult Intelligence Scale would be administered to applicants at eleven centers throughout Alabama, and on this basis the selection of the participants for referral to the (Alabama) State Employment Service for training allowance clearance would be made.

On April 24, 1964, Dr. Wolff returned and conducted a one-day workshop with ten members of the Tuskegee testing team on the techniques of administering the Wechsler Test. On April 25, the Macon County applicants were given the WAIS by the testing team, and on April 26, the team met with Dr. Wolff for a critique and evaluation of the previous day's activities. The team then left Tuskegee on April 27, to interview and test applicants in the various centers. In addition to the Wechsler Adult Intelligence Scale, the Gray Oral Reading Test was also given to determine the applicant's reading level.

On the basis of the interviews and the tests, 180 applicants were accepted and notified to report to Tuskegee Institute. Only those who functioned below the eighth grade were accepted initially, but at least one-third of these could not report for a variety of reasons.

While no attempt was made to verify the reasons for failure to accept training after participation in the recruitment procedures, it was generally understood that some had started crops which would be left with no one to attend them. This meant a financial loss which, at this point, they could not see beyond. Some had created debts and were working them out. The ones to whom they were indebted would not release them. In some cases, families would have had to move out of the houses in which they were living. After all, houses were provided in exchange for farm labor. Still others were doubtful that anything good could come from this program if they had to leave their families behind. They lacked the confidence, courage, and imagination that the challenge of change inspires. For to be suddenly swerved from their familiar surroundings into a sea of new impressions seemed to be a giant step which some were not able to accept.

So in reviewing the applications to select persons to fill the vacancies created by those who did not accept, it was necessary to accept a small number who had completed more than eight years of schooling; and who, in some cases, had reading abilities as high as the twelfth grade. In addition, a small number were selected who had IQ levels lower than would have been acceptable otherwise.

Table 3 indicates the results from the Gray Oral Reading Test.

Table 3

Results from the Gray Oral Reading Test Scores and Professed Grades Completed

Number of Trainees	Professed Grade Completed	Number of Trainees	Gray Oral Reading Test Score
4	12+	9	12+
29	12	6	12
17	11	6	11
25	10	2	10
19	9	6	9
29	8	3	8
13	7	5	7
22	6	14	6
10	5	17	5
7	4	26	4
3	3	24	3
2	2	28	2
0	1	23	1
0	0	3	0
0	0	9	*
180		180	

Subsequent discussion in the research section will treat in some detail how the reading level derived from the Gray Oral Reading Test and the results of the Wechsler was used to group the trainees according to learning potential.

Information on income was sought but reporting was indefinite and unreliable; however, the information received indicates that 75 per cent of the trainees were unemployed while 25 per cent were underemployed.

The recruitment of the 180 trainees who met eligibility requirements was a more difficult task than anticipated because of the many problems encountered. Locating eligible persons became a tedious personal contact procedure because generally accepted communications media did not reach the persons of educational and socio-economic levels sought. Many persons desirous of participating in the program ignored eligibility requirements, applied, and had to be interviewed before rejected because they were too young, or had too high an educational level, or were not the head of a household. Other persons who appeared eligible from initial interviewing were rejected when objective tests were used to screen them; and lastly, applicants found to be eligible through interviews and tests found themselves unable to enroll because of personal problems. Therefore, it was necessary to make speedy replacements to meet the project schedule which was to begin on June 1, 1964.

Although strenuous efforts had been made to recruit a rather homogeneous group, the trainees enrolled varied considerably in years of schooling, reading ability, and life experiences.

Although the participants had initially indicated their choice of a trade to be pursued during the first month, they were given an orientation course in each trade. Each trainee spent one week in each trade. The exposure to all trades either strengthened the desire to learn the skill he had chosen or aroused interest in another area in which he possibly had greater aptitude and could be more successful. At the end of the month, although a few trainees transferred to a different trade area, most of them preferred to remain in the trade area they had first selected.

Early in the program, it was discovered that the high performers should be separated from the low performers for most effective teaching. Accordingly, the trainees who had already been divided into trade groups of approximately forty each (brickmasonry, carpentry, farm machinery and meat processing) were further divided into A and B groups of twenty each for English and mathematics. The A groups consisted of participants above the fourth grade level in performance. The B groups consisted of participants performing at or below the fourth grade level.

Later in the program, the B groups were again divided into the B group which worked on third or fourth grade level and the BB group which included non-readers and non-writers.

At the other end of the spectrum, we found twenty-seven participants with reading ability at or near the twelfth grade. The admissions officer at Tuskegee Institute agreed to give them the college entrance and placement tests normally used for college freshmen, including The Davis Reading Test, The California English and Mathematics Achievement Test, The School and College Ability Test, and The Henmon-Nelson College Adjustment Test.

Those trainees who scored above the cutoff point of 21 on the SCAT Test were enrolled in regular freshman college English but continued in their regular trade training. There were ten trainees in this category. The remaining seventeen trainees, who took the college battery of tests but scored below the cutoff point, were returned to their regular classes in the MDTA program.

In like manner, trainees who earned a total raw score of 88 and above on the California Mathematics Test were acceptable for admission to Freshman Mathematics 101. Individuals who scored 115 and above were exempted from Mathematics 101 and eligible for Mathematics 102. Those who scored less than 88 were enrolled in remedial mathematics on the campus. See Table 4.

As the trainees assembled on the Tuskegee Institute campus on that bright first day of June, it was not hard to discern that this was an unusual group. One may have reflected that Booker T. Washington welcomed to the campus just such a group in 1881 and here, nearly one hundred years later, his dream of helping the man farthest down is still being realized.

Some came poorly clad; others were in clean work clothes; still others were hardly distinguishable from the college crowd.

Table 4

Characteristics of Trainees Who Took the College Placement Examinations

(SCAT Cutoff = 21; Math. Cutoff = 88)

Trainee Number	Age	Weschler I.Q.	SCAT Verbal	Calif. Math.	Grade Completed
2	31	105	33	112	12
4	20	106	31	109	13
19	30	89	21	96	12
21	35	85	31	71	8
40	22	87	21	92	12
42	35	78	20	45	7
60	32	73	11	30	11
69	40	88	20	45	7
73	30	92	17	65	12
87	30	85	23	62	8
89	26	0	16	52	12
94	49	69	10	64	5
98	27	92	25	95	13
102	29	74	14	36	12
111	25	89	13	50	11
112	43	94	36	88	10
113	28	85	19	75	10
119	25	91	15	88	10
120	28	89	16	58	12

Table 4 (Continued)

Trainee Number	Age	Weschler I.Q.	SCAT Verbal	Calif. Math.	Grade Completed
125	23	77	12	57	12
126	29	79	14	64	12
127	28	94	25	72	9
129	29	84	14	60	12
142	37	0	19	76	10
146	29	86	15	43	12
150	25	84	15	73	8
166	30	91	15	70	11

There were those who were obviously undernourished and overworked as well as those to whom life had been kinder. One wondered if medical treatment should not have preceded any attempt to teach for surely poor eyesight, defective hearing, throbbing toothaches and low vitality would be obstacles to hurdle in the classroom. Such need had not been anticipated so several months elapsed before medical examinations could be set up in cooperation with the John A. Andrew Memorial Hospital on the campus.

Within the group were also a small number of near alcoholics. These were docile men seeking to relieve their misery and hopelessness. Only two had to be dismissed; the others rallied, rose to the occasion and graduated sober and dependable, a credit to themselves and to the program.

During the first days of training as this group moved about the campus, questions began to arise in the minds of some community and campus personnel as to the advisability of having such a group on the campus. Unsympathetic remarks circulated concerning "these characters who might cause trouble." "Would personal property be safe?" "Would the girls be harmed?"

As rumors circulated and were heard, one of the trainees, Arthur McElderry, was inspired to write the following poem:

For the Men of Tomorrow

So we are toiling along this way,
For you men of another day;
To prove to the people the best we can,
That we are worthy of this sweet land.

When men have striven for you and me,
That we, too, may gain our victory;
We'll show the world what we can do
And what people said about us isn't true.

They said that we would ruin the show,
But we're going to let others know;
That what some people say
Just isn't so.

So now we're going to do our best,
To keep the door open for the rest;
Who are yet at home and in distress
And don't have this chance for happiness.

-- Arthur McElderry
Brickmasonry A

Here was a man on fifth grade achievement level who was so appreciative of this opportunity, he was compelled to express his hope and faith. He expressed in this poem his desire for the program to be successful. He wanted to dispel all fears that undesirable characters would invade the campus. He appealed to the men to open the way for others by proving their worth. A copy of the poem was given to each trainee.

Whether or not this poem had any influence on the behavior of the men is uncertain, but certainly the conduct of these men as a whole was irreproachable. No incident of any proportion was attributable to them. No personal property or equipment was lost or misplaced. The old belief that deprived persons, generally, are apt to take what they don't have and want was certainly not apparent in this group.

However, poor attitudes toward learning were very apparent. A fair number of the trainees were more interested in the allowance checks than in the benefits to be derived from training. Their first task was to establish confidence through almost immediate success in the subject matter areas. It was their continual responsibility to capitalize on the interests and needs of each individual and to develop a sense of responsibility on the part of the trainee. Counselors and teachers worked together to instill essential values and to help trainees clarify their thinking and minimize their fears.

Just what could the participants expect from the program, provided they were willing to cooperate and put forth the necessary effort? First and foremost was being prepared in a trade so that they would be able to get a job. New jobs meant more income and more income meant being able to help their families have the things they needed.

It was realized at the beginning that one year's training could not completely fill the gap left vacant by meager educational opportunities and long years of poor language practices. The best that could be hoped for was to take each man as he was, and help him progress as far as his ability would allow. We knew that each individual would progress--how far depended on his determination and ability.

Most of the 180 trainees were glad to have this opportunity and eager to begin training. As they introduced themselves, many of them spoke of their inability to support their families, of opportunities they did not have but wanted for their children, of broken homes because they were unable to obtain a good job, and of the hope they now had in this last chance to gain an education and a skill. One elderly farmer spoke of "giving up" his education on this very campus thirty years ago and regretting it more than anything else in his whole life. Another spoke of having to leave his wife and daughter in Ohio because of his inability to get and keep a job. He wanted to be united with his family again. Still another spoke of his embarrassment when his children brought home books that he could not read. One participant, James Hampton, said, "After twelve years of running from pillar to post trying to find a job that I really wanted--a job that I could depend on--a job that would help me to support my family as a family should be supported without having my children to steal, rob and cheat because of my not being able to support them like I should, this opportunity knocked on my door. I said it was a blessing from God. I'm going to do my very best, not only to help my family but other families in my community and elsewhere. One of the main things that I am looking forward to is sending my children to college and not letting them come up as I did." As each spoke of his problems, an earnestness of purpose seemed to pervade the group for each knew whereof the other spoke. One felt that this common bond would cement friendships within the group and that they would make the best of this opportunity.

III. HEALTH SERVICES

Although the need for medical examinations had not been anticipated, it was observed early in the program that such a need was evident. Not only were absences from classes increasing because of illness but even those who attended often seemed listless and complained of headaches and painful eyes, stomach-aches and toothaches which caused them to have to leave the classroom. Obviously, not much learning could take place under such conditions so physical examinations and medical care were set up for the trainees in cooperation with the John A. Andrew Memorial Hospital on the campus.

In November, Dr. Eugene H. Dibble, Jr., Medical Director of the hospital,and his staff, administered thorough physical examinations to the 172 trainees that were left in the training program. This examination consisted of the following services:

1. Eyes, ears, nose and throat
2. Chest X-ray
3. Genetalia
4. Smallpox immunization
5. Typhoid immunization
6. Paratyphoid immunization
7. Serological test
8. Height, weight and blood pressure

Several cards and forms had to be filled out by the trainees prior to some of these services. This was difficult for many and almost impossible for some. Here was a clear indication that these men were still unable to perform the normal everyday activities expected of adults. Much help was needed to read and fill in the simple health forms. Some of the trainees were still unable to write their names legibly nor could they write names of their families. They did not know the meaning of the word spouse and could not interpret some of the questions. A few had 1965 for date of birth. All of this pointed clearly to the communication skills teachers that work in this area was mandatory.

On the whole, the physical examinations did not reveal any serious malfunctions. Some of the common conditions which were revealed included upper respiratory infections (everyday colds), weight problems, eyes (with need for examination for glasses), and allergies to various immunization injections. As a result of this series of medical examinations a comprehensive medical care program was developed for the trainees.

The results of the blood tests revealed the need to call in fourteen of the 172 trainees for a re-check of irregularities found in their initial blood sample. Four of the fourteen trainees called in for a re-check were given treatment for primary syphilis. The nurse for the Macon County Department of Public Health was given the names of suspected carriers. One of these trainees was transferred from Meat Processing because he would not be permitted to handle meats.

The general physical examinations also indicated the need of three trainees to be placed on special diets immediately--one on a

1,200 calorie reduction diet and two on bland diets for stomach ulcers. Arrangements were made for these trainees to obtain three meals daily in the Dietary Department of the John A. Andrew Hospital at no extra cost to them.

It might be interesting to note that one trainee refused to take the dietary meals because he had already paid for his meals at the cafeteria on the campus even though he was informed that no extra cost would be involved.

The symptoms of stomach ulcers of another trainee warranted the scheduling of Upper Gastric Analysis to be administered by the Radiologist who visits the Institute's Health Clinic. He was placed on a Malox and Probanthine Treatment.

Following the physical examinations, fourteen trainees obtained services of the Institute's Opthalmologist. Twelve were furnished eye glasses by the State Volcational Rehabilitation Service. The other two were not eligible under this State service. One bought his own glasses; the other continued without them. One of the twelve who received glasses underwent an operation to remove cataracts before he received the glasses.

An account of a history of eye treatments for one of the trainees is as follows: A twenty-six year old participant stated that at the age of ten (in the third grade) he lost sight in both eyes which was due to "bad blood." Through the joint efforts on the part of his parents and his school principal, medical treatment was obtained. As a result of two years of continuous treatment by an "eye specialist," he regained the sight in both eyes. His parents were informed at that time that as he matured there might be a recurrence of poor vision. The doctor, however, did not prescribe glasses.

During the early part of November, this trainee's eyes began to give him severe pain. This project's cooperative community resource services were used in his behalf. Prescribed medication and glasses by the Institute's Ophthalmologist relieved the strain to the extent that the trainee stated, "With my eyeglasses, I feel like a newborn baby."

One trainee was given an examination by the Institute's dentist who found that the minimum amount of dental work needed would cost $105. Though strenuous effort was made to obtain the necessary financial assistance required for this and other trainees to secure dental services, no money was available. Tooth extractions and treatment were done at trainee's expense.

Experiences during the year made vividly clear to us that for this segment of our population many things which they considered minor could, and often do, develop into major problems.

A trainee enrolled in Meat Processing had the following experience. On Saturday, September 12, 1964, while working with his family picking cotton, he attempted to catch a basket used to load cotton. A splinter from the basket stuck beneath his right thumb nail. He used a pocket knife in an attempt to remove the splinter. Unfortunately, the splinter was so deeply lodged that the greater part of it was not removed. He dismissed this as a minor incident.

On September 17, his instructor noticed limited participation on the part of this trainee and asked why such a sudden change in his classroom activities. The trainee showed the pus-laden swollen finger and the teacher advised him to report immediately to the Health Clinic for treatment. The trainee then indicated his fear of going to the Clinic because he believed they would give him penicillin injections and he was allergic to such drugs. After much explanation of the need for medical care, the trainee promised to go to his family physician.

The week-end passed and he returned to class having had no professional treatment. His mother had tried to puncture the deeply formed pus with an unsterilized pocket knife. At this time, the thumb had become more painful and pus formation increased tremendously. Only after the instructor made the following shocking remarks did the trainee show real concern for professional treatment: "Don't go to have the finger treated and I will be here to see the doctor cut either the entire finger or entire hand off. Also, I should like to remind you that we can't permit you or anyone else to work with meats in that condition. You will either have this condition remedied or be dropped from Meat Processing."

Sometime during that night, either he released the pus himself or the pus area erupted. The next morning he returned to class and stated what had happened and that he felt no need to go for treatment. At this point, the case was referred to the Counselor-Director who had him report at once for the needed medical treatment. Only after the finger was lanced and the remaining splinter removed did it begin to heal.

Another incident of this kind involved a trainee in farm machinery. In shop, one day, a machine on which he was working dropped on his leg, cutting in to the bone. He made no mention of the injury but tied a dirty pocket handkerchief around it to stop the bleeding. The next day when he limped into the communications class, the teacher inquired about the limp and was told about the accident. She requested that he go immediately to the hospital for treatment. The trainee expressed distrust of doctors and fear of the hospital and said he would have it looked at that night. The next day it was quite obvious that he was in pain. He said his wife had bathed it in epsom salt all night and that it would be better. "Furthermore," he said, "I don't have any money to pay a doctor." The leg was now swollen to twice its size and he had to split his pants leg for comfort. Even so, the teacher had to insist and take him personally to the hospital. His leg was treated and the patient recovered.

From the above cited experiences, trainees learned quite vividly that medical treatments are to help and not injure; also, that small injuries can and often do develop into serious ones and such should be treated by professionals and not home remedies. In addition, many trainees have taken their wives and children to the hospitals in their home towns and some have even taken their families to the Institute's hospital for physical examination, as the result of their changed attitudes.

IV. BASIC EDUCATION

A. Communication Skills

It is sincerely hoped that enough content will be presented here to give the reader an over-all view of how the language arts teachers attempted to fulfill the course objectives outlined.

1. Major Objectives
   a. To develop the art of using good language in terms of speaking, reading and writing as they relate to one's vocational skills and to his personal needs and development, and also to recognize the virtue in listening and understanding well before one takes any form of judgment.

   b. To develop on the part of these adults, a clear-cut understanding and an appreciation of the fact that simple but correct everyday English is an indispensable tool in the development of our technological society.

2. Specific Objectives
   a. To assist these adults in creating and maintaining an:

      (1) Interest in the use of the important reading resources related to his trade.

      (2) Interest in the use of reading resources for personal improvement for stimulation, recreation, and general information.

      (3) Awareness of the characteristics of effective listening.

      (4) Awareness and a desire to improve his vocabulary--self-improvement and directed techniques of vocabulary building.

b. To develop on the part of these adults:

(1) Mechanical skills basic to reading: independence in word recognition and meaning, and mature eye-movements.

(2) Basic comprehension skills, especially those most functional in demand of his trade.

(3) Correct (adult) study habits.

(4) Ability to express oneself orally and meaningfully in a complete and grammatical manner.

(5) Ability to write legibly.

More specifically, these plans when achieved were to help these deprived adults to overcome as many of their poor language habits as their abilities and one year's instruction would allow. Some of the language deficiencies exhibited were as follows:

1. Complete inability to read or write.
2. Inability to read and listen.
3. Phonetically deaf--had little or no conception of word sounds.
4. Inability to communicate their ideas coherently.
5. Poor letter formation producing illegible writing.

Recognizing the language needs of the trainees was an important step; how to meet these needs was even more important.

Next, the teachers were responsible for setting the stage for learning to generate a wholesome and friendly atmosphere for constructive learning to take place. Although the men were eager to learn, many were deeply concerned about adjusting to being in a classroom. Some were nervous in their speech, others were fearful of asking questions and still others showed absolutely no interest in learning the language arts. After all, how could they be blamed? They had lived for years without attaching any importance as to how one should speak and write, and for the first few months it was a Herculean task to get them in a compromising frame of mind where they would start to listen, ask questions, and do their assignments.

Listening is another important skill. During a lifetime, we spend much of our time listening; therefore, this skill was introduced as a means of understanding what another person has said and being able to recall or react to such information.

Basically, the attitude of the adults enrolled in this program is of a practical nature and responds best when he understands the practical need for what he does. Therefore, the communication skills were introduced and the teachers, through discussions, demonstrations, and other visual aids, tried to show the men how the study of these skills related to improved reading habits and greater over-all benefits to them. It was further pointed out, that a man could be a good carpenter, mechanic, brickmason or meat processor and still be unable to communicate his ideas effectively, but that if he were proficient in communications, his chances of success at his trade would be greater.

Because the men exhibited such diverse abilities, levels of education, and interest, several homogeneous groups were formed. The groups were first divided according to choice of trade. Then, the next group division was determined by reading abilities indicated by scores made on the Gray Oral Reading Test and on the results of the Wechsler Adult Intelligent Scale.

This arrangement minimized the wide gap between interest, reading abilities and measured IQ's. It was felt that as a result of such grouping, the teachers could stimulate greater interest while they effectively assisted each man to progress at his own rate of learning.

The first approach toward improving the trainees' communication skills was the Henny Family Phonics System. The more advanced group started the system with some reluctance; many of them thinking they were beyond this stage of reading. However, when the first informal test was given, they realized how much they were gaining from this system. The periodic tests showed that the men had grown tremendously. The participants remarked that this type of reading helped them greatly in the Gray Oral Reading Test which was again administered to the group. They were now beginning to recognize new words from context.

A workbook, I Want to Learn English, by Smith and King, called attention to and gave practice in selecting correct verbs and using correctly such words as can - may; well - good; teach - learn; and past - passed. Attention was given to synonyms, homonyms and antonyms. This workbook included letter writing and paragraph writing which was a good follow-up of Henney's section on English.

Each class hour, a verb was selected such as: did - done; wrote - written; gave - given, etc. As the roll was called, each man responded with a sentence using the verb correctly. As they began to hear themselves speak correctly, their language showed great improvement. If anyone used the verb incorrectly, others in the class recognized the mistake and politely corrected him. They began to check each other. When oral reports were given, the men recognized any mistakes and brought it to the speaker's attention when he had finished. A spirit of cooperation and a wholesome attitude toward constructive criticism was easily developed.

Exercises with "tongue-twisters," voice modulation, pitch, and expression helped the men speak clearly and distinctly. The tape recorder helped the men hear their own inadequacies, and then the men were asked to correct them.

The SRA listening program increased and improved the listening ability of the participants. The stories were read to the group by the teacher after which they answered questions concerning the reading. The stories were short at first but became increasingly long and difficult. The T.Q.L.R. method: tune-in; question; listen; and recall; proved invaluable in listening.

Newspaper and TV reports, stories from the Readers Digest Skill Builder Series, Dictionaries and Encyclopedias were frequently used to check information. Lively discussions and informal debates were planned and executed by the class. One debate was on the subject: "Does Heredity or Environment Have the Greater Effect on One's Life?" The men were able to get material from the library to prove their points.

Probably the most significant breakthrough in this area of instruction came about after the very basic communication skills were taught. This breakthrough came about as a result of coordinating the vocational skills with the language arts. The vocational skills instructors continuously supplied the communication skills teachers with a list of words commonly used in the vocation being taught. For example, the instructor in meat processing supplied words and phrases unique to meat processing and, therefore, the communication skills teachers were always in a position to relate directly the lesson in the classroom to the activities in the shop. The teachers would not be using sentences with nouns such as sirloin, T-bone steak, etc., on a day when the vocational skills instructor would be teaching sausage-making or maybe the grading of eggs. The communication skills teachers would be using sentences concerned with sausage-making or grading of eggs. This pattern of operation was common to the four trade areas. It must be noted here than an effort was made to make "semi-specialists" out of the trainees. The meat processors were taught to speak the meat processor's language, the carpenters were taught to speak the carpenter's language, and also this was true for the other two vocational skills. The surprising event here was that the trainees displayed greater interest than ever before in their academic work and absenteeism was almost non-existent. Absenteeism being down to a minimum, trainees performed much better than they usually do, both in their academic classes and in the vocational skills. There is little doubt in the writer's mind that once the academic work is intelligently coordinated with the vocational skills, trainees grow faster in both areas than when the vocational skills teachers and the academic teachers are working without a knowledge of what the other is doing. The important and crucial aspects of this type of coordination rests with the speed with which the academic teachers can get the trainees to absorb the basic elements in the academic area. For example, why try to coordinate communication skills with meat processing when the trainees are saying: "A good beef cow are . . .?" He must first learn to say: "A good beef cow is . . ." and he must know why one statement is wrong and the other is right.

Coupled with this coordination of communication skills and vocational skills was a series of lectures and field trips designed to broaden the trainees' intellectual and experimental horizons. Every Friday from 11:00 A.M. to 12:00 Noon, all trainees listened to a lecturer from the college faculty, the community, or the state. These lectures covered a series of timely topics and more often than not trainees displayed very great interest in them and asked several questions.

In addition to the lecture series, trainees were shown a film every Thursday afternoon from 3:30 to 4:15 P.M. These films covered various topics and while the trainees had no time to discuss them on the day the films were shown, they were asked to discuss them in their communication skills classes and to write compositions on the films which they saw. Related to their communication skills course was a series of field trips. Among the first of these was a tour of the Tuskegee Institute Library. This was really more than a tour or a field trip as such because the trainees were taught how to use the library. Although not all caught on the first time, several benefitted from the experiences. Other field trips were primarily related to the trainees' vocational field of endeavor. For example, the meat processors visited the meat department in the large grocery stores, the carpenters and brickmasons visited large on-going construction while the farm machinists visited tractor companies and farms where farm machines were in operation. These field trips, while adding to the trainees' experiences, gave them a variety of interesting subjects about which to write in their communication skills classes.

Probably the most rewarding experience for the communication skills teachers was the fact that sixteen of the trainees were enrolled on the campus in college English after months of the rigorous training to which they were exposed in the MDTA program. These trainees who were enrolled on the campus did not do quite as well as the regular college students, but this is understandable in the light of the many attendant factors.

Finally, all trainees were given extensive training in filling out application forms. They were taught to fill out applications from the Employment Service Office, the many local personnel offices in and around Tuskegee and several other large business concerns throughout the country.

The investigators are of the opinion that training in the communication skills is as important as training in the vocational skills and that every trainee appreciated this fact by the time the training program was over. All trainees who completed the program showed some growth in their communication skills, and although all did not grow as fast or as high as others, the experiences gained by the teachers have left them (teachers) with a wealth of information which can be used to improve their techniques and approaches in future programs with similar trainees.

B. Number Skills

The instructors in this area anticipated more difficulties from the trainees in terms of teaching them mathematics than did any other instructors. Actually, subsequent events proved without the shadow of a doubt that their fears were unfounded. The big problem was that the mathematics instructors thought they could teach culturally deprived adults in the same manner as they could teach high school and college students. It did not take them long to find out that it could not be done; and moreover, the instructors realized early that they had to adjust their methods if they expected to get results.

Interestingly, one day two of the dullest trainees walked into the investigators' office and began to explain how frustrated they were in their mathematics class--they were not learning anything, the instructor was going too fast, and many other complaints. In the course of the discussion one of the investigators asked: "If I had $7\frac{1}{2}$ feet of board and you had $6\frac{1}{2}$ feet of board, how many feet of board would we have together?" Both men were dumbfounded; neither could answer. The question was rephrased: "If I had $7\frac{1}{2}$ dollars and you had $6\frac{1}{2}$ dollars, how much would we have together?" The correct answer, $14.00, was given by the trainees simultaneously with the ending of the question. This told us something and held in part the key to what the problems were in the mathematics classes. The mathematics instructors were not communicating in familiar language to the trainees and the trainees did not know that mathematical principles remained constant. As a result of this experience, a series of conferences ensued with the mathematics, English, and trade instructors. Particularly the mathematics instructors had to be oriented to the fact that effective learning among culturally deprived adults can be accomplished easier when the learning situations are related to real life experiences. This is no criticism of the mathematics teachers because the average age of the mathematics instructional staff was less than thirty. The outstanding accomplishment here was that once the teachers got the "know-how" of teaching the culturally deprived, the trainees progressed beyond the point of all imagination.

With this brief background, the general objectives of the course were as follows:

1. To develop on the part of the trainee, mathematical competence required in the trade in which he is enrolled.
2. To equip trainees with mathematical abilities, knowledge, and experiences that will assist in meeting their work and everyday requirements.

Within the framework of these general objectives, the specific objectives designed for the general mathematics course were as follows:

1. Reading numbers
2. Operations of addition, subtraction, multiplication, and division
    a. Whole numbers
    b. Fractions

1) Reducing fractions to lowest terms
2) Changing improper fractions
3) Changing mixed numbers to simplest form
4) Changing a fraction to higher terms
5) Finding the lowest common denominator and changing fractions to equivalent fractions
6) Adding fractions and mixed numbers
7) Subtracting fractions and mixed numbers
8) Comparing fractions
9) Multiplying of fractions and mixed numbers
10) Dividing of fractions and mixed numbers

3. Decimals

a. Reading and writing decimals
b. Rounding off decimals
c. Adding decimals
d. Subtracting decimals
e. Comparing decimals
f. Multiplying decimals
g. Dividing decimals
h. Multiplying whole numbers and decimals by 10, 100, 1000, etc.
i. Dividing whole numbers and decimals by 10, 100, 1000, etc.
j. Changing fractions to decimals
k. Changing decimals to common fractions--table of equivalents, per cents, decimals and common fractions

   - l. Common fractions and decimals
   - m. Short methods in multiplication and division

4. Percentage and Its Applications
   - a. The meaning of per cent
   - b. Changing per cent to decimals
   - c. Changing per cent to common fractions
   - d. Changing common fractions to per cent
   - e. Finding per cent of a number
   - f. Finding what part one number is of another
   - g. Commission
   - h. Discount
   - i. Margin and profit and loss
   - j. Interest
   - k. Fees and licenses
   - l. Taxes
5. Powers and Roots
   - a. Squaring numbers
   - b. Extracting square roots
6. Graphs
   - a. Bar graphs
   - b. Circle graphs
   - c. Line graphs
7. Basic Units of Measurements and Practical Applications in Measurement
   - a. Measure of length--practical applications using units of length

- b. Measure of area--Practical application measuring area
- c. Measure of volume--practical application measuring volume
- d. Capacity--liquid measure
- e. Capacity--dry measure
- f. Measure of weights
- g. Measure of time
- h. Relationship of volume, capacity, and weight units of measure
- i. Metric system--measure of length, area, volume, capacity of weight
- j. Measure of speed
- k. Measure of angles and arcs

8. Everyday Problems--Business Mathematics
    - a. Simple and compound interest
    - b. Promissory notes
    - c. Checks
    - d. Installment buying
    - e. Stocks and bonds
    - f. Life insurance and annuities

Essentially, the foregoing outline was covered in about eight months and then the investigators proceeded to coordinate mathematics with the vocational skills. It was when this coordination was initiated that the fastest growth in mathematics was identified. The trainees displayed as great an interest in mathematics as they did in English after they discovered that all of the problems in the classroom were directly related to the work in their specific vocational skills. Here again, as in the communications skills, it must be noted that before any detailed coordination can be effectively done, the trainee must be taught the basic concepts and principles in mathematics. The following mathematical outline indicates the areas that were covered in each vocational skill:

Brickmasonry

1. Measurements
    a. Area calculation--rectangles
    b. Area calculation--circles
    c. Volume calculation--solid
2. Taking off Quantities
    a. Mortar
    b. Brick walls and footing
    c. Chimneys and fireplaces
    d. Steps
    e. Piers
    f. Fire stepping
    g. Concrete formulas
    h. Concrete footings
    i. Concrete columns
    j. Concrete walls
    k. Concrete floors
    l. Concrete stairs
    m. Concrete walks and driveways
    n. Septic tanks

3. Plastering and Stuccoing
    a. Wood lathing
    b. Metal lath and plastic board
    c. Plastering
    d. Stuccoing
4. Estimating
    a. Rubble--stone
    b. Walls--hollow tile and gypsum
    c. Labor

Carpentry

1. Measurements
    a. Area calculations--rectangles
    b. Area calculations--triangles
    c. Area calculations--irregular figures
    d. Area calculations--circles
    e. Volume calculations--cubes, rectangles
    f. Volume calculations--cylinders
2. Estimating
    a. Girders
    b. Sills
    c. Floor joints
    d. Bridging
    e. Rough flooring
    f. Studding
    g. Wall plates

  - h. Rafters
  - i. Sheathing and roof boards
  - j. Building paper
  - k. Furring and grounds
  - l. Siding
  - m. Exterior trim
  - n. Roof covering
  - o. Window and window frames
  - p. Doors and door frames
  - q. Stairs and interior--door jambs
  - r. Interior trim and cabinets
  - s. Finish flooring and paper
  - t. Rough hardware
  - u. Sheetmetal and iron work
  - v. Trim hardware
  - w. Labor for framing outside covering and trim
  - x. Labor for floor logging and sanding
  - y. Labor for concrete forms

Farm Machinery

1. Tools and Their Sizes
   - a. Size of drills for tappet pipe threads
     - 1) Tap diameter or stock size
     - 2) Pitch or threads per inch on coarse threads
     - 3) Tap drill size, inch, number of letter
     - 4) Pitch or threads per inch on fine threads

            5) Pipe threads nominal size in fractions and mixed numbers
                a) Inside diameters
                b) Outside diameters
                c) Threads per inch
        b. Pulleys Speeds and Diameters
            1) Gear speeds and sizes
            2) Idlers, or intermediate gears
            3) Pulley trains (problems)
            4) Gear trains (problems)
            5) The lathe and its uses--finding the r.p.m. of spindle with a belt on cone pulleys
        c. Automobile transmission (problems)
            1) Shifting gears--high, intermediate, low and reverse gears
2. Velocity or Surface Speed in Feet per Minute--Variations in Cutting Speeds
3. Tapers: Definitions and Formulas
    a. Gradual
    b. Uniform increase
    c. Decrease
    d. Diameter or thickness
4. Using Electricity in Farm Shop Skills
    a. Use of volts (problems involving the use of)
    b. Amperes (problems)
    c. Meter reading and measurement of amount of
5. Calculating the Simple Ratio and Proportion

6. The Problems of Loans and Budgets and Expenses in Farm Shop Skills
    a. Budget and income of an individual farm
    b. Expenses involved in loans
        1) Simple interest
        2) Compound interest
        3) Time payments and installments
7. Labor estimates

Meat Processing

1. Weights and Measurements
    a. Equivalent measure of weight
    b. Application of weights and measurement in slaughtery
    c. Problems in standard federal meat inspection
    d. Packing house weights and measurements
    e. Measures of time
    f. Measures of capacity
2. Thermometer Scales
    a. Fahrenheit
    b. Centigrade
    c. Reaumur

Having covered the outline, the following are samples of problems that the trainees could work before completing their training.

1. Find the cost of the following retail packages of prepared cuts.

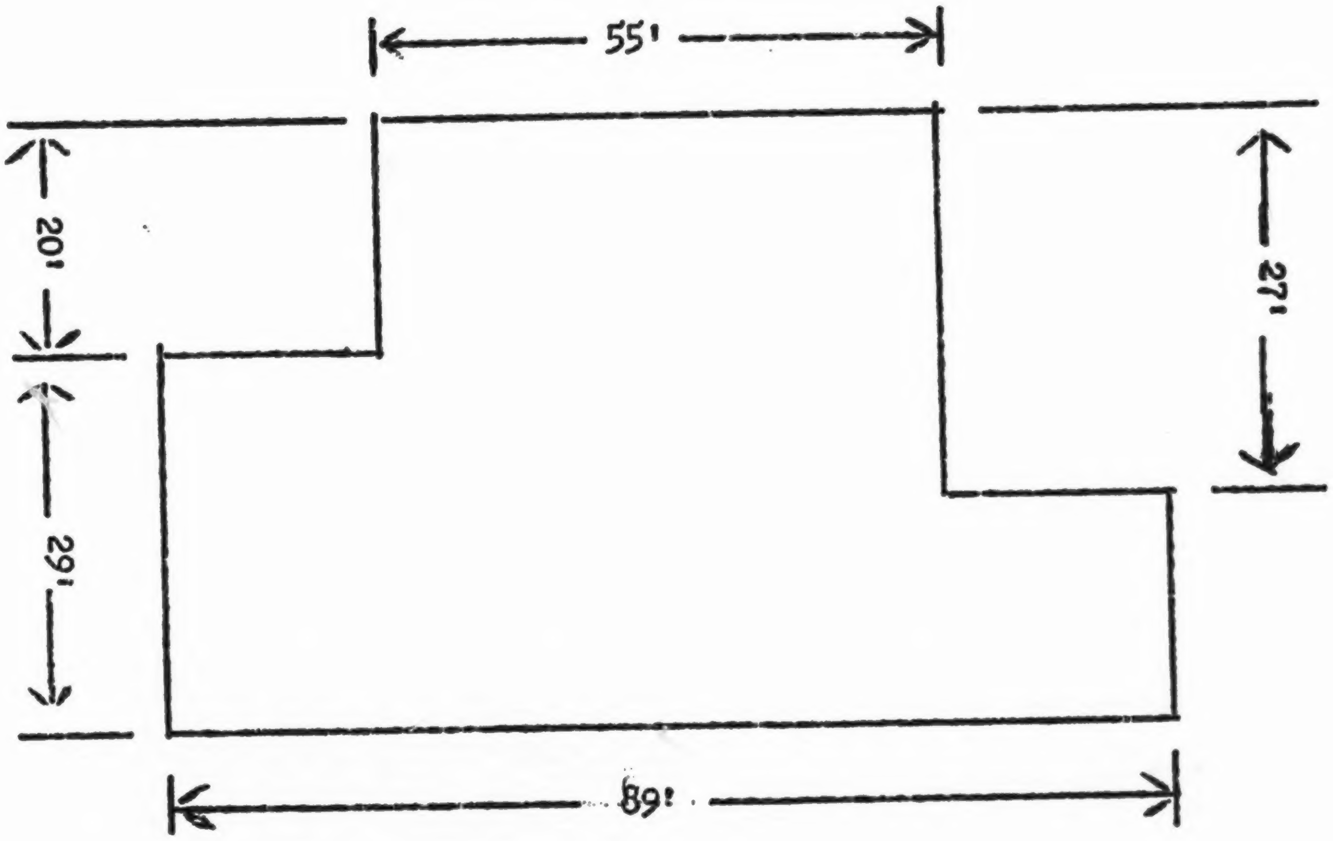
Number of packages	Weight	Price
9	8 lbs. 6 ozs.	$ .65 per lb.
25	19 lbs. 9 ozs.	.45 per lb.
16	28 lbs. 14 ozs.	.20 per lb.
20	36 lbs. 15 ozs.	.55 per lb.

2. Complete the chart with the supplied information.

Wholesale cut	Front Quarter	Grade	U. S. Good
Supplier	L. Carter	Weight	155 lbs.
Price/lb.	$. 55	Total	$62.00

Retail Cuts	% Yield	Weight	Price/lb	$ Value	Amount of Profit	Per Cent Profit
Brisket		13 lbs. 5 ozs.		5.40		
Rib Steak		19 lbs. 15 ozs.		17.77		
Arm Roast		23 lbs. 14 ozs.		12.47		
Blade Roast		38 lbs. 13 ozs.		30.65		
Short Rib		23 lbs. 13 ozs.		11.68		
Soup Bone		3 lbs. 13 ozs.		.53		
Bones		9 lbs. 6 ozs.		1.41		
Ground Beef		17 lbs. 8 ozs.		8.58		
Suet		2 lbs. 2 ozs.		.11		

Figure 1



DIRECTIONS: Find the following for Figures 1 and 2.

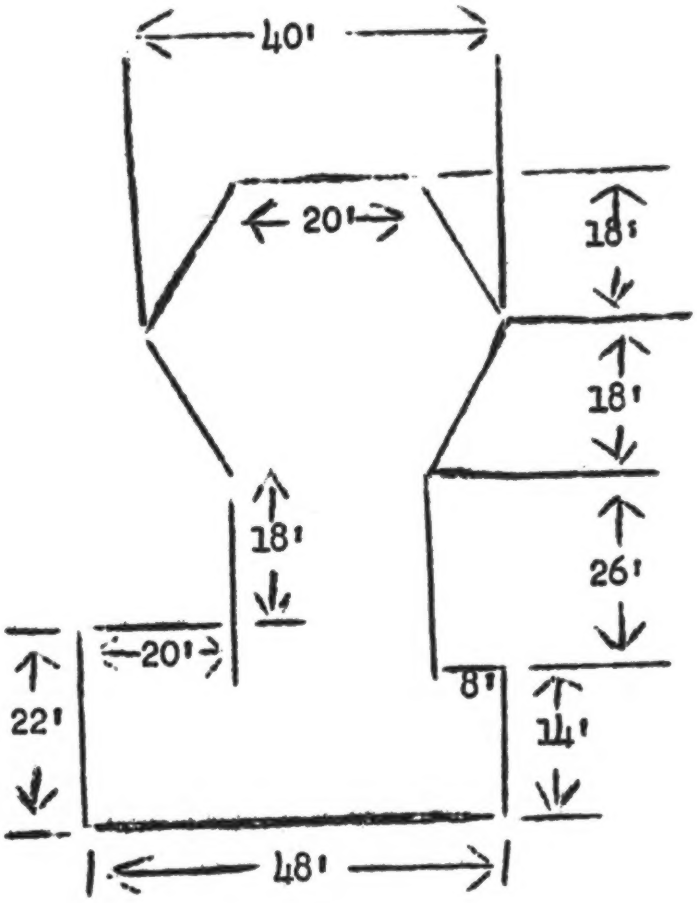
3. Find the number of cubic feet of concrete in foundation walls for Figures 1 and 2 exclusive of the footing. The foundation is 3 feet deep and 12 inches wide:

Figure 1 ________ Figure 2 ________

4. Find the number of cubic yards of excavating that are necessary for the foundation walls of the figure shown. Make no allowance for footing under the foundation walls.

Figure 1 ________ Figure 2 ________

Figure 2



5. How many cubic yards of concrete are necessary to pour the floors for each building? The concrete for each floor is 3 inches thick.

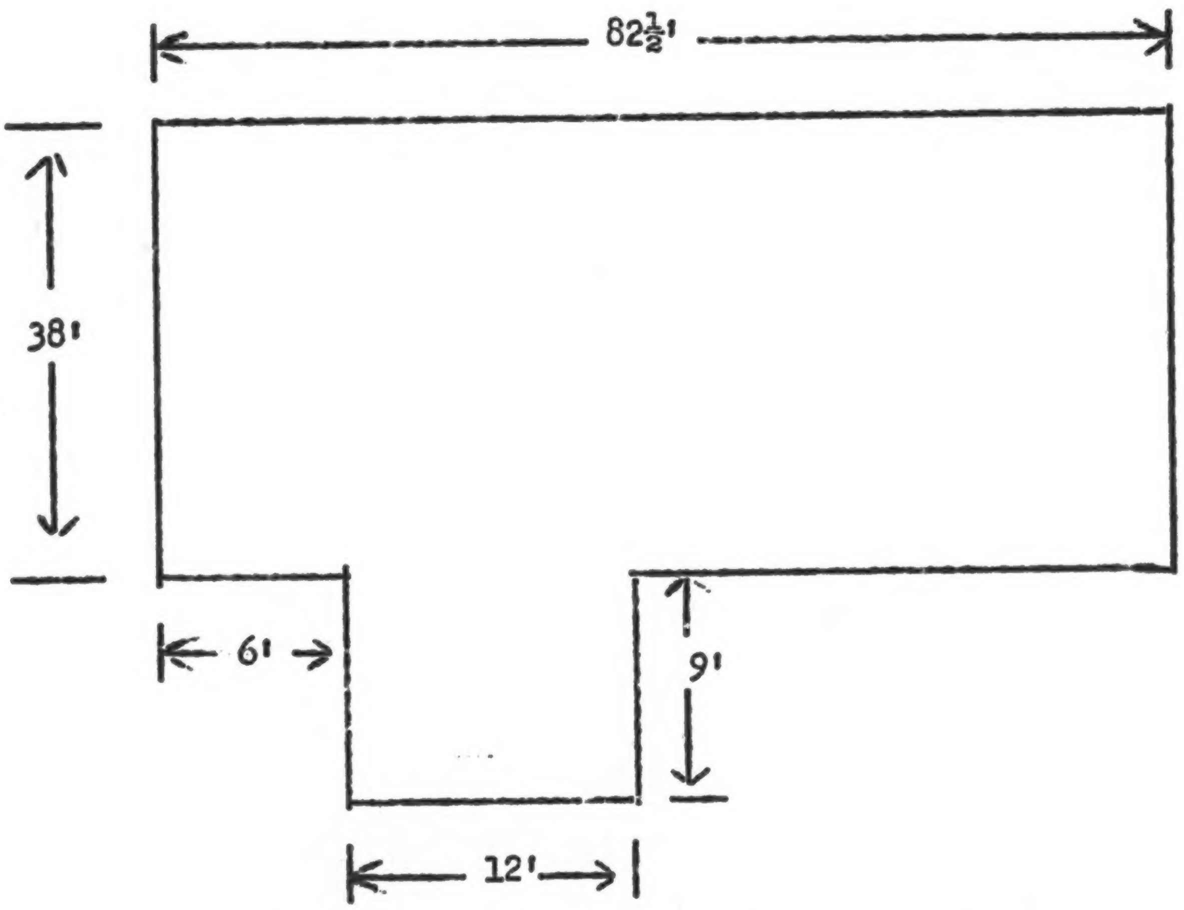
Figure 1 ________ Figure 2 ________

6. If the 8 inch walls in Figure 1 and 2 are 8 feet, 6 inches high, how many bricks will be required to complete Figure 1 if 224 square feet are openings and 560 square feet are openings in Figure 2?

Figure 1 ________ Figure 2 ________

7. Find the number and length of rafter, 16 inches on center with 18 inches over hang. Let the seat cover 3/4 inch wall sheathing with a ridge board of 1 5/8 inches. Use the gable type roof in the above stated problem. (Use a 4/12 pitch).

Figure 3

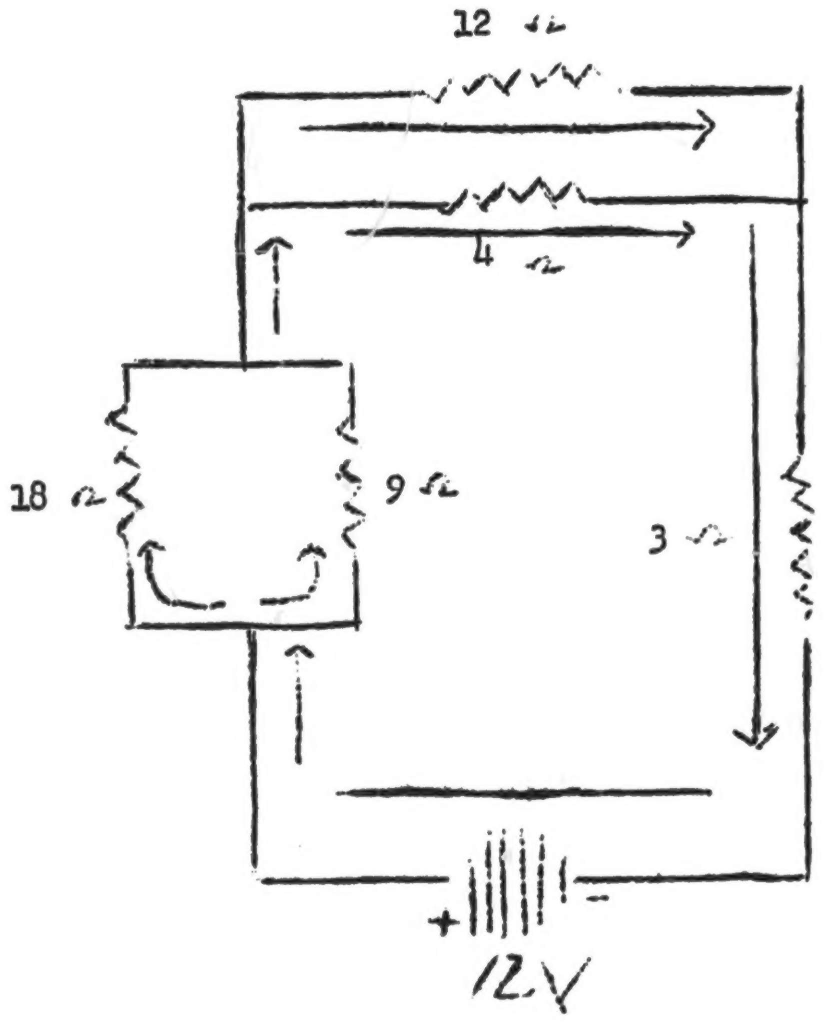


8. A contractor has 3,755.00 deposited in a 2% interest drawing account. If the interest is paid every six months and no withdrawals are made, how much money will he have in the bank at the end of three years?

Note: This is compound interest; use the simple interest for the first period (6 months in the case mentioned) add this to the principal and figure the second period and so on for each period.

9. In the series-parallel circuit on the left, find the total resistance in ohms; the voltage potential at each resistor; the total voltage potential and the number of amperes.

Figure 4



10. A line shaft runs at 196 r.p.m. It is driven by a motor that runs at 1,200 r.p.m. The motor pulley is 4 inches in diameter. Find the diameter of the line-shaft driven pulley.

Figure 5

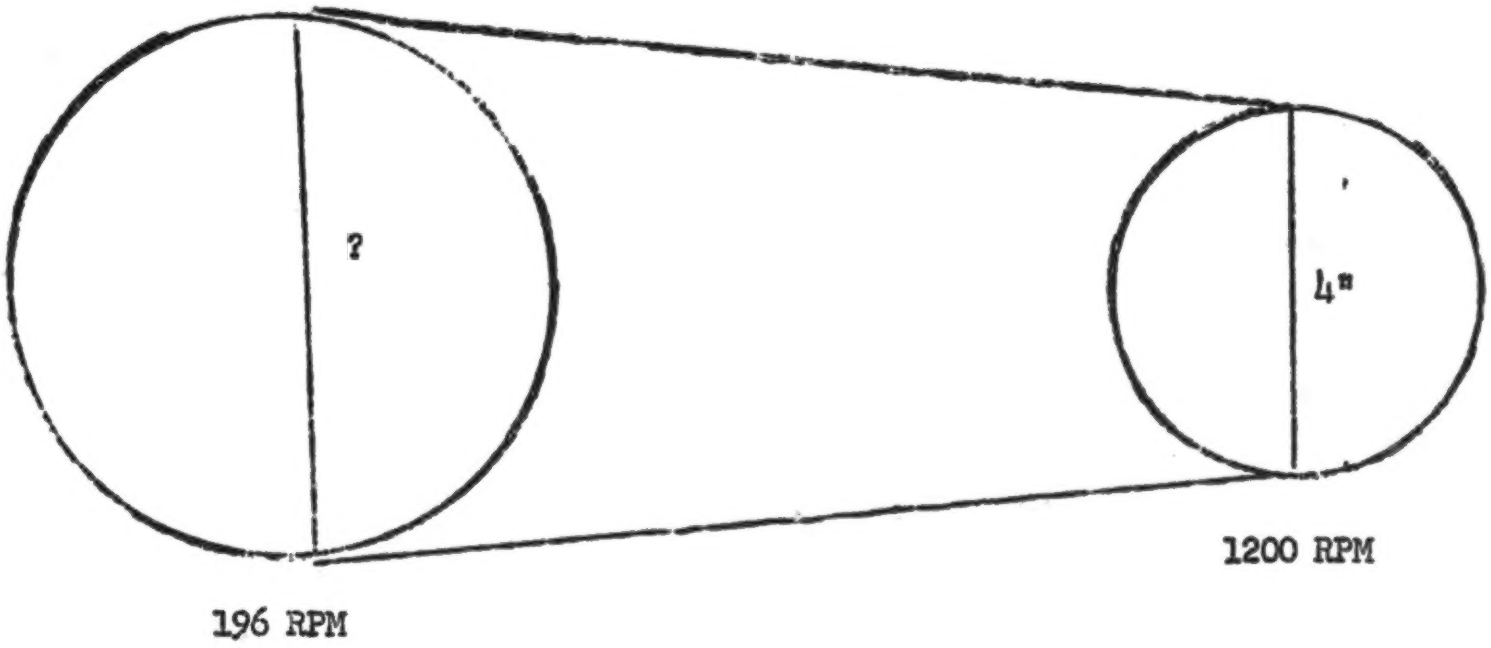
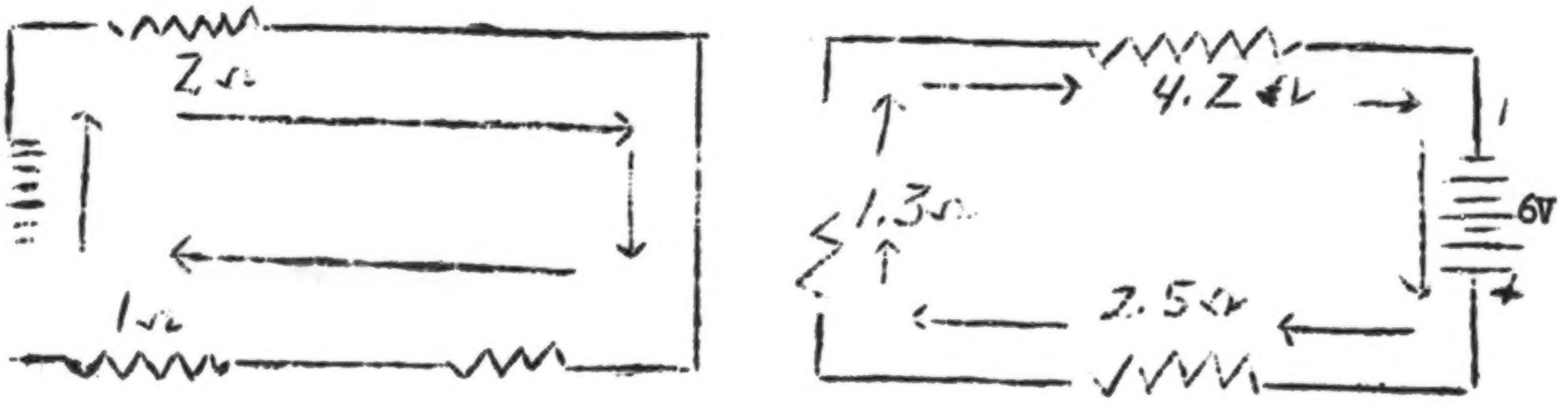


Figure 6



11. In the series circuits above, find the total resistance in ohms; the voltage drop at each resistor; the total voltage drop and the number of amperes.

12. The radiator of a certain automobile holds 15 quarts. If this radiator contains 6 quarts of anti-freeze and the rest water, what part of the solution is anti-freeze? What part is water?

The accomplishments in mathematics have been good and there is no doubt in the writers' mind that these accomplishments must be attributed to the fact that the vocational skills were coordinated with the number skills. In addition, the teachers were very dedicated and put in a lot of overtime with the trainees. Two of the mathematics instructors lived on the campus in the same dormitories with the trainees and this gave them an opportunity to work with the resident trainees at nights. In conclusion, it has been demonstrated that mathematics, though a difficult subject, can be taught to the most culturally deprived adult once his interest is aroused.

OCCUPATIONAL TRAINING

Although each trainee had selected a trade area during the recruitment phase of the program, it was decided that a one month orientation period to expose the men to each of the four trade areas would be desirable.

The men were grouped according to their initial trade interests where they were given one week of orientation. The following three weeks were spent in orientation to each of the remaining three trade areas. The instructor in each trade area discussed with the trainee all aspects of the particular program involved: its requirements, its assets, and its limitations.

Following the orientation period, the men were given the opportunity to change trade areas. However, out of 186 men only three changed from their initial choice.

Reviews of the occupational training in Brickmasonry, Carpentry, Farm Machinery and Meat Processing follow:

A. Brickmasonry

June 1, 1964 through May 31, 1965 presented many opportunities in brickmasonry; opportunities that might have been otherwise classified as problems. Why were they opportunities? They were opportunities because each trainee offered a challenge to test and improve techniques and methods in teaching brickmasonry.

Although it was realized at the beginning that one year's training could not completely prepare one as a journeyman bricklayer, it could, however, enable one to enter the labor market as an apprentice.

The daily schedule for each participant consisted of three hours of skill training. This meant that one could not lose any time without being seriously affected. Motivation of the trainees was never a problem. It appears that the training allowances and the hope of preparedness to secure a job at the completion of training were sufficient stimuli.

At the beginning of the program the masonry department was located in one of the trade buildings which belongs to the School of Mechanical Industries. In this building we had approximately 2,500 square feet of floor space which made it possible to give each trainee a basic foundation in bricklaying.

Before too much emphasis was placed on practical brickmasonry it was necessary to teach a background of theory. This particular phase included a brief history of the trade, tools used in the trade, and demonstration in the use of the trowel. A variety of live jobs were available to us through the Buildings and Grounds Department of Tuskegee Institute. The trainees constructed concrete block walls (four to twelve inches thick) and brick walls in reconstructing the old Carver Laboratory on the campus. In the same building, they laid quarry tile floors and lined the walls with structural glass tile.

A screen pattern of bricks to cover the air-conditioning units connected with the new dormitories was constructed. Cement walks were poured and some were repaired. A brick veneer was put on the Buildings and Grounds Office and shop building. The trainees covered the Book

Store with a Roman brick wall. Because residence type work such as chimneys, fireplaces, and steps was not available, the trainees built fireplaces complete with chimneys, and steps in the shop. A few of the trainees had the opportunity to build Bar-be-que pits and retaining walls in the community.

The problems encountered in the area of brickmasonry were few. Of these problems, tools were a major factor. We did not have sufficient tools at the outset for all of the trainees.

An additional problem was that of basic education. To be successful in masonry, one needs to have the ability to read and figure. At the beginning of the program 50 per cent of the masonry trainees did not have the ability to read or figure well but during the year they improved significantly. Although the "B" group remained somewhat weak in this area, the "A" group could do the complete estimation and lay-out from a simple set of blue prints.

There have been very favorable reports from both employer and trainees who have been placed on jobs. Some are earning above entry level pay and express deep satisfaction and appreciation. Some are building or reconstructing their own homes and those of others in their communities. Some have put steps to their churches and have attained a higher status in their communities because of their skill.

The following objectives and course outline served as guidelines during the entire training period.

Objectives: Bricklay (Const.) Entry Level

I. To develop on the part of these trainees:

   A. Basic skills, knowledge and personality factors necessary to become a bricklayer entry level.

   B. Manipulative skills and the necessary related technical information pertaining to the:

      1. Use, value, and care of tools and equipment used by the bricklayer

      2. Construction of masonry walls, chimneys, partitions, piers, arches, fireplaces, and smokestacks.

   C. A new appreciation, understanding and desire to improve the role he plays in his present community, or his future place of residence.

II. To familiarize trainees with some of the techniques and materials that have been recently developed by or for the masonry construction industry. Emphasis given to the use of the Common American Bond.

III. To create on the part of trainees a new insight and a desire to foster or advocate:

   A. On and off-the-job personal safety and hygiene practices

   B. Sound labor-management relationships.

OUTLINE OF COURSE OF STUDY

Name of Course: Bricklayer, Construction (Entry Level)

Units	Hours	Skills to be Developed and Knowledge to be Acquired	Methods and Techniques	Instructional Materials, Teaching Aids etc.
I. Introduction	6	1. Brief history of the trade	Lecture-Demonstration	Charts, filmstrips, reference textbooks, workbooks
		2. Tools used in the trade		
		3. Demonstration use of the trowel		
II. Mortar used in bricklaying	19	4. Content	Lecture-Demon.	
		5. Mixing mortar	Demonstration	
		6. Spreading mortar	Practice	
		7. Physical characteristics of mortar	Lecture-Demon.	
III. Introduction to bricks	30	8. Physical characteristics	Lecture-Discussion	
		9. Area & volume method of estimating	Lecture-Practice	
IV. Bricklaying	99	10. Build 8" wall American Bond 4'		
		11. Build 4" wall American Bond		
		12. Build 12" wall American Bond		
		13. Build 16" wall American Bond		

Units	Hours	Skills to be Developed and Knowledge to be Acquired	Methods and Techniques	Instructional Materials, Teaching Aids etc.
V. Brick wall and bonds		14. Sizes of brick walls and their use	Lecture-Discussion	
		15. Foundation walls and footings	Lecture-Discussion	
		16. Bonds and bonding	Lecture-Discussion	
		17. Joints and jointing in brickwork	Lecture-Discussion	
VI. Bricklaying practice	13	1. Build a 4" corner	Practice	Charts, filmstrips, reference textbooks, workbooks
	13	2. Build an 8" corner American Bond	Practice	
	26	3. Build a 12" corner American Bond	Practice	
		4. Build a 16" corner American Bond	Practice	
VII. Brick walls and bonds	26	1. Corner construction	Lecture and discussions	
	26	2. Coursing brickwork		
	26	3. Laying out for brickwork		
	26	4. Laying brick to a line-Demon.		
VIII. Bricklaying	18	1. Laying brick to a line 4" wall	Practice	
	27	2. Laying brick to a line 8" wall	Practice	
	26	3. Laying brick to a line 12" wall	Practice	

Units	Hours	Skills to be developed and knowledge to be acquired	Methods and Techniques	Instructional Materials Teaching Aids etc.
IX. Brick-laying	6	1. Build concrete block wall 8"	Practice (Partition Construction)	
		2. Build concrete block wall 6"		
	13	3. Build concrete block wall 6"		
X. Build composite masonry walls	12	1. 4" brick w/4" concrete block backing		
	12	2. 4" brick w/8" concrete block backing		
	12	3. 4" brick w/4" hollow tile backing		
	12	4. 4" brick w/8" hollow tile backing		
XI. On-the-Job	40		Experiences	
XII. Build brick piers and columns	9	1. Build 20"x24" hollow pier		
	9	2. Build corner pier		
	9	3. Build T pier		
XIII. Chimney and smoke-stack construction	40	1. Fireplaces		
		2. Brick mantles		
XIV. Ornamental brick work	10	1. Build a flat arch		
	10	2. Build a basket weave pattern		
	10	3. Build brick steps		

Units	Hours	Skills to be Developed and Knowledge to be Acquired	Methods and Techniques	Instructional Materials, Teaching Aids etc.
XV. Simple blueprint and reading and equipment estimating	20			
XVI. Individual review practice and theory sessions	153			
XVII. On-the-Job	3		Safety Practices	

B. Carpentry

In the first four weeks of training in the carpentry division, an attempt was made to survey the history of carpentry trade and what would be expected persons who might become members of this group.

At the beginning of the second four weeks, we endeavored to give the trainee a basic appreciation for and an understanding of the carpentry trade.

The carpentry course consisted of erecting concrete forms, laying out buildings, erecting wood building framing, installing exterior and interior finishes, trim mill work and hardware, laying many kinds of floors, stair building, insulation and roofing. The trainees also received instruction in erecting prefabricated wood components of the entire wood structure. Much emphasis was put on the use and care of tools.

We were fortunate in the carpentry department in that which ever branch of study we were in we could always visit projects on the campus or in the community where live projects were going on. It was to the advantage of all for us to join in and help do that phase of work which fitted into our training program.

There were many projects in our field done solely by our trainees, such as form construction, installation of concrete floor with drainage, building of mangers, making and hanging doors and installation and repairing of windows.

We were fortunate to have jobs on the campus where insulation was installed in walls and ceilings. There were many motivated shop projects which entailed the making of bulletin boards, display panels and some cabinet work.

One of our major projects was an addition to a farm house which consisted of an addition of two rooms, hall, bath and general repair to existing structure. There were other jobs alone which consisted of wall framing, sheetrock hanging, setting and hanging doors and windows.

The trainees in carpentry erected a three-room building as a shop project. It was designed so that many types of corners, hips, valleys, common and gripple rafters could be shown.

The trainees were exposed to the following power tools: tilting arbor saw, radial arm saw, raines molder, jointer and grinder. They learned the operation and maintenance of each of these machines.

Although there were various degrees of progress exhibited by the trainees enrolled in carpentry, the majority of them showed much promise for becoming successful mechanics. Moreover, it seemed that their total development during the year's training had placed them at the brink of becoming a credit to themselves, their families and the carpentry trade.

The following objectives and course outline served as guidelines for the carpentry area during the entire training period.

Objectives: Carpentry (Const.) Entry Level

I. To develop on the part of these trainees:

   A. Basic skills, knowledge and personality factors necessary to become a carpenter entry level.

   B. Manipulative skills and the necessary related technical information pertaining to the

      1. Use, value, and care of tools and equipment used by the carpenter.

      2. Methods and types of framing and finishing employed in house and other frame construction.

   C. A new appreciation, understanding and desire to improve the role he plays in his present community or his future place of residence.

II. To familiarize trainees with some of the recent techniques and materials that have been developed by or for this industry. Emphasis will be given to low-cost houses and pre-fabricated wood components.

III. To create on the part of trainees a new practical insight and a desire to foster or advocate

A. On and off-the-job personal safety and hygiene rules and regulations

B. Sound labor-management relationships

OUTLINE OF COURSE OF STUDY

Name of Course: Carpentry (Const.) Entry Level

Units	Hours	Skills to be Developed and Knowledge to be Acquired	Methods and Techniques
I. Tools and Materials	30	1. Classification of tools 2. Proper use of tools 3. How to use the framing square 4. Woods 5. Lumber 6. Nails 7. Screws 8. Blots	Lecture Demonstrations Audio-Visual aids
II. Carpentry Arithmetic	30	1. Problems confined to lengths, perimeters, hypotenuses, areas, volumes, and other problems as they occur in a carpenter's practice	

Units	Hours	Skills to be Developed and Knowledge to be Acquired	Methods and Techniques
III. Blueprint reading	36	1. Symbols and abbreviations	
		2. Dimensioning and scaling	
		3. Plot plan	
		4. Plan views	
		5. Elevation views	
		6. Details	
IV. Laying out	30	1. Selection of site on lot	
		2. Staking out	
		3. Laying out with square	
		4. Laying out with surveyor's instrument	
		5. Batter boards	
V. Foundations	60	1. Footings	
		2. Reinforcements	
		3. Foundation walls	
		4. Footing drainage	
VI. Concrete forms	75	1. Footing forms	
		2. Wall forms	
		3. Beams forms	
		4. Column forms	
		5. Floor forms	

Units	Hours	Skills to be Developed and Knowledge to be Acquired	Methods and Techniques
VII. Sills, girders, beams	36	1. Types of sills	
		2. Types of girders	
		3. Types of beams	
VIII. Framing floors and walls	50	1. Joists	
		2. Plates	
		3. Studs	
		4. Bracing	
		5. Bridging	
IX. Framing roofs	90	1. Types of roofs	
		2. Types of rafters	
		3. Dormers	
		4. Cornice work	
X. Framing stairs	36	1. Definitions	
		2. Laying out stringers	
		3. Types of stairs	
		4. Hand rails	
XI. Exterior walls	36	1. Sheathing	
		2. Felt	
		3. Wall boards	
		4. Exterior wall finishes	

Units	Hours	Skills to be Developed and Knowledge to be Acquired	Methods and Techniques
XII. Insulation	20	1. Insulating materials 2. Kinds of insulation	
XIII. Interior walls and ceiling	36	1. Lath and plaster 2. Wood 3. Dry-wall	
XIV. Roofing	55	1. Metal 2. Asphalt 3. Asbestos	
XV. Floors and finishes	36	1. Concrete 2. Wood 3. Tile	
XVI. Doors, windows and trim	65	1. Types of doors and frames 2. Types of windows and frames 3. Baseboards, moldings and casings	
XVII. Farm building	36	1. Types of farm buildings 2. Foundations 3. Wall anchorage 4. Braces and ties	
XVIII. Prefabrication	36		

C. Farm Machinery

The class in farm machinery was divided into two groups: "A" in the morning, and "B" in the afternoon. There were forty trainees in the classes: 22 in the "A" group and 18 in the "B" group. The class periods were three hours in length; 8:00 A.M. to 9:30 A.M. with a fifteen minutes break, 9:45 A.M. to 11:15 A.M. for "A" group; 1:00 P.M. to 2:30 P.M. with a fifteen minutes break, and 2:45 P.M. to 4:15 P.M. for "B" group. At this stage in the program, none of our equipment had come and there were no books. This made it rather difficult to decide at which point in the course we could start until more facilities and more information were available. We decided to assemble information on the internal combustion engine principle and use this material as a starting point.

The "B" group met at 1:00 P.M. on the 29th of June and after introductions our class roll was taken and we immediately started into the discussion of engines. At the break, 2:30 P.M., we made a tour of the shop to see what units we might use for laboratory assignments. There were several single cylinder engines in the shop that had not run for some time; there were two tractors and three small 4-cylinder engines that could be used, but this was not enough work to keep forty men busy. We were able to secure from another department a 1-250 model Wayne Street Sweeper that had not run for two years and requested that we be permitted to put it back into operation. This request was granted.

In the meantime, we found that there were two truck engines and one tractor that had been discarded. We arranged to secure the tractor and the engines for our trainees to overhaul. By this time, enough material was assembled on the internal combustion engines and the four stroke cycle principle so that each trainee could have a folder covering engine fuel and exhaust system. We immediately set out to get the trainees acquainted with the material so that they would be able to understand what they were doing when they started work.

With our new folders on hand, we spent the first period each day in the classroom -- 8:00 to 9:30 A.M. and 1:00 to 2:30 P.M. Second periods were spent in the shop extending the airlines to reach our benches, making up some electrical extension cords and electrical test lights. With the test lights, we tested such units as ignition coils, generators, starter motors, distributors, light bulbs and starter switches. We also ran tests on fuel pumps and made up our extension lights.

By the end of July we were able to find enough tools to mount the engines we had found, and we had cranked most of the small engines in the shop. Furthermore, we cranked and serviced a General Motors Diesel Engine and began working on the Wayne Street Sweeper. One group of trainees had started to overhaul an International truck engine. There were other light jobs such as brake repairs, muffler repairs, generator starters and fuel pump repairs. By this time the trainees had developed a basic understanding and approach to the servicing and overhauling of engines.

The month of August was for the most part an extension of July. The classes were progressing slowly, partly because of their limited reading ability and partly because of their new environment. The study of internal combustion was moving slowly, but some improvement was being made. We were still in the process of building engine stands, cranking engines and repairing lockers so that we could have a storage space for our parts. We completed work on an International truck, completed and tested the Wayne Street Sweeper, cranked the F-20 Farmall tractor and two truck engines that were brought in from the farm. We also cranked the White Truck that was at one time the Booker T. Washington Mobile School. This vehicle had not been used since 1946.

During the month of September we studied engine lubrication and cooling systems. We also studied the operation of our new oxy-acetylene welding outfit. In the laboratory, we were busy mounting the six engines we had purchased for practice work. During this month they were cranked. A group of our students experienced servicing and operating the 100 mower, hay conditioner, hay rake and hay baler; we baled about thirty acres of hay on the Institute farm.

October was quite a busy month. Our classroom studies continued as we studied the fuel system updraft and downdraft carburetor; slide films were shown of the internal combustion four stroke cycle principle, multi-cylinder engines, clutch, updraft and downdraft carburetors. We started work on an Allis-Chalmers Crawler that had been submerged in water; the crankcase was filled with water; the pistons were rusted and stuck. We had to remove the engine and free the pistons, grind the valves and valve seats, hone cylinders, drain and flush transmission, repair final drive and replace one final drive clutch.

This turned out to be a very extended operation that was not completed until March. We had the opportunity to service and operate the 316 cotton picker, picking some forty acres of cotton, serviced and operated the 203 IHC combine and gathered some thirty acres of lespedeza hay seed. We then received our 706 LP gas tractor, 504 gas and 504 diesel tractors. All of these units have been operated by the trainees. We used the 706 LP gas tractor to pull the 5-bottom moldboard plow, the 504 gas and 414 diesel to pull the 14 ft. disc harrow and 3-bottom moldboard plow.

During the month of November, we completed picking our cotton and finished tilling some sixty acres of land, completely overhauled a Plymouth engine and brake system, winterized our cotton picker, combine and hay baler in preparation for storage which gave the men instructions on winterizing cooling systems of internal combustion engines, including all tractors and trucks and a number of cars. The operation included: checking thermostats, checking radiator caps, checking cooling systems for leaks including radiator core, hose, expansion plugs, gaskets, flushing radiators, testing for leaks and installing antifreeze.

In December we replaced the engine in the Allis-Chalmers Crawler, removed engine from the Farmall M Tractor, started an Allis-Chalmers diesel crawler that had not operated for several years, removed the engine for overhaul, disassembled a Ford tractor for repair and repaired the bed on the trailer that had rusted out. Now it was time for Christmas vacation.

We returned to class from Christmas vacation on January 4, 1965 and started setting up welding booths. We assembled the remaining equipment and arranged our tool room. Parts for the transmission had arrived for the Farmall M Tractor and we began installing them. Our Wayne Street Sweeper had broken down and we had ordered shaft bearings and sprockets for the Hopper elevator. These parts were installed as soon as they arrived during the latter part of January.

In February, we continued our study of electricity including batteries, coils and distributors. The men assigned to engines continued their operations; work on the Farmall tractor transmission continued as well as work on the Wayne Street Sweeper. We started to reassemble the Ford Tractor in which we had put the sleeve earlier. Now the weather was getting better and we could till the soil. We removed the cotton picker from the 504 International diesel tractor so that it could be used to operate some of the units. We also started our practice welding classes, two on gas welding and two on arc welding.

In the month of March, much of our time was spent operating our five and three bottom moldboard plows and the six and twelve feet disk harrow, for we had some eighty acres of land to plow. We completed the work on the M tractor transmission and started work on the engine. The Allis-Chalmers Crawler was completed, however, work on the Wayne Street Sweeper was progressing slowly. All trainees who were working on engines in the laboratory alternated with those who were tilling the soil so that everyone was exposed to both jobs.

The month of April found us thinking about the closing of school for it was evident that if we made any more assignments something would not be completed. It was important, too, that we kept the welding booths operating if we hoped to give everyone some welding experiences; also, we had to complete the plowing and harrowing we had started. The Farmall M tractor engine had to be completed and there were a few items on the Allis-Chalmers Crawler to be completed. We had to be sure that all of the parts removed from these units were found. It was also important that all of the attachments for the tilling and harvesting equipment be in place and ready to be returned.

The month of May was a busy month for the class in Farm Machinery. The job of getting our equipment in shape for closing out, and at the same time trying to give the trainees some additional information and preparing for the school closing made the schedule very full.

First, we wanted to get in some more hours in soil preparation, so we used all plows and harrows that were available. We had about fifty acres of hay to harvest. This gave us an opportunity to use our mower, hay conditioner, hay rake and baler.

Earlier in the year we removed the cotton picker from the 504 diesel tractor so that we could use the tractor for other work. We had also removed the 3-row cultivator from the 706 LP gas tractor since it was the only tractor that could pull the five bottom moldboard plow.

These units, the cotton picker and cultivator, had to be put back on these tractors before they could be returned to the dealer. These were rewarding experiences.

Several students had to complete engines that had been disassembled earlier -- these were completed. The Farmall M, Farmall A tractors, and Allis-Chalmers Crawler were also completed.

We had several students who had not had a chance to do their oxy-acetylene and arc welding. Considerable time was used in an effort to get them acquainted with the welding equipment.

The tilling and harvesting equipment had to be ready to return to the owner. On these pieces of equipment the engines were cranked and the equipment serviced so that they would be ready to go when necessary.

Now it was time to prepare for the closing exercises. On Class Day, Friday, May 21, each department had a demonstration. Farm operations were performed: oil change, lubrication, service oil filter, service air cleaner and service fuel filter.

On the last day of class, demonstrations were given on bleeding the fuel system on a B-414 diesel. This is an important operation since it will be necessary to bleed the system any time the tractor runs out of fuel or if the tractor is operated until it stops when the valve is closed between the fuel tanks and fuel pump. Most of the trainees have a good understanding of this operation.

The following objectives and course outline served as guidelines for Farm Machinery during the entire training period.

Objectives: Repair and Operation of Farm Machinery Entry Level

I. To develop on the part of these trainees:

   A. Basic skills, knowledge and personality factors necessary to become a farm mechanic entry level.

   B. Manipulative skills and the necessary related technical information pertaining to

      1. The use and the care of hand power tools, mechanical and electrical equipment.

      2. How to drive, operate, and do minor repairs on farm equipment.

   C. The abilities to be able to go into the field to serve as an efficient (entry level) trouble shooter of farm equipment.

II. To familiarize trainees with some of the techniques, materials and equipment that have been recently developed for the farming industry. Emphasis given to the use and care of equipment designed especially for soil preparations, planting, cultivation and harvesting.

III. To create on the part of trainees a new insight and a desire to practice or advocate

   A. Periodic economical inspection, servicing and repairing of farm mechanics equipment so as to obtain optimum value of these expensive equipment.

   B. On and off-the-job personal safety and hygiene practices.

   C. Sound labor-management relationships.

OUTLINE OF COURSE OF STUDY

Name of Course: Farm Mechanic (Entry Level)

Unit	Hours	Skills to be Developed and Knowledge to be Acquired
I. Survey of Farm Power	52	1. Farm power progress and transition 2. Mechanization and labor requirements 3. Mechanization and labor output 4. Tractor and horse census and distribution
II. Importance of Farm Machinery to Agriculture	26	1. Farm machinery and its relation to agriculture 2. Machinery reduces hours of labor 3. Good equipment 4. Special machines for special crops 5. Machinery for terraced fields 6. Farm management 7. The future
III. Farm Power Sources and Adaptability	39	1. The sources of power 2. Animal power 3. Power of horses and mules 4. Power of wind 5. Water power 6. Electric power

Unit	Hours	Skills to be Developed and Knowledge to be Acquired
IV. Adjust and Minor Repair Diesel and Gasoline Engines	39	1. Engine trouble 2. Causes of poor compression 3. Fuel and carburetor troubles
V. Ignition Trouble	123	1. Battery ignition troubles a. Open switch b. Battery weak or discharged c. One or more weak coils in a battery d. Loose or corroded connections e. Broken wire f. Short circuit due to bar wire, moisture on coils, spark plugs or connections g. Coil winding short circuited or burned out h. Breaker points rough, wet, oily, poorly adjusted, or sticking i. Spark plugs fouled and short circuited by carbon j. Spark plug insulator cracked or broken k. Spark plug damp or wet on outside l. Spark plug points too close or too far apart m. Spark out of time
		2. Magneto ignition trouble a. Brushes dirty or broken b. Armature dragging because of worn bearings c. Movable breaker point stuck and does not work freely d. Breaker point rough, dirty, oily, or improperly adjusted e. Winding short circuited f. Cracked or broken insulatives g. Magneto grounded h. Magneto poles incorrectly arranged like jobs should be on same side i. Magneto weak

Units	Hours	Skills to be Developed and Knowledge to be Acquired
VI. Timing Troubles	39	1. Can gear improperly timed with crank shaft gear 2. Valve clearance improperly adjusted 3. Ignition - timing mechanism such as breaker point or distributor poorly adjusted or improperly connected
VII. Overheating Engine	7	
VIII. Engine Knocking and Pounding	39	
IX. Engine Starting Troubles	39	
X. Minor, repair of Farm Equipment Involving some Basic Skills in Weldings, Painting, Lubrication and Hydraulics		
XI. On-the-Job Experiences	195	Live job experiences relative to trouble shooting (inspection servicing and minor repairs found needing specified correction) 1. Tractor 2. Combines 3. Cotton pickers 4. Hydraulic lifts 5. Corn pickers 6. Hay balers 7. Disk plow 8. Tractor mowers 9. Planter (corn, peanut, cotton)

D. Meat Processing

The meat processing classes began by giving the trainees an overview of the meat processing industry. This included a general scope of the meat industry, phase of meat processing, and the purpose and responsibility of meat processors.

Before the practical instructions could begin in meat processing, it was first necessary to establish the requirements for being successful in retail meat cutting. These requirements were grouped as follows:

1. Personal hygiene
2. Honesty
3. The knowledge and art of meat cutting
4. Proficiency in English and mathematics
5. Good work habits

A substantial part of the first month in training was concerned with the importance of personal hygiene in meat processing.

The following month emphasis was placed on the care, use and maintenance of tools and equipment. The trainees learned to identify and operate various types of instruments both manual and electrical.

The next phase of the training was concerned with the introduction to and application of slaughtering. Lectures and demonstrations were presented on beef, veal, lamb and pork. Later,poultry and fish were added in the lecture and demonstration classes.

One of the most important units during the entire course dealt with the processing of meat. There was a direct relationship between the meats slaughtered and the meats processed. Trainees learned the importance of cooling and aging various types of meat. They were given detailed instructions and practice in various methods of meat cutting. Special demonstrations were conducted to show effective methods of curing and pickling meats. Finally, the men were taught to wrap and package various cuts of meat.

In the area of marketing and displaying the trainees learned pricing of meats. They were also taught to display meats for eye appeal as well as orderly sales. After several lectures, demonstrations and laboratory exercises dealing with the above mentioned areas, visits were made to several local markets for the purpose of observing meat arrangements in the display cases. Trainees were prompted to note methods involving counterman-customer relationship. Following the visits to the various markets, discussions related to previous class activities and observations during the visits to the markets proved exceptionally helpful to the men.

Throughout the year much emphasis was placed on storeroom management. This involved inventory of supplies, tools, and products sold and those in stock. The aspects of employer-employee relationships and employee-customer relationships were stressed and applied continuously.

Observations indicate that most of the trainees in meat processing learned the basic fundamentals necessary for becoming effective entry-level meat cutters. Moreover, their total development in terms of personal characteristics and human relations should assist them in making contributions to the field of meat processing.

The following objectives and course outline served as guidelines for the meat processing area during the entire training period.

Objectives: Meat Processing Entry Level

I. To develop on the part of these trainees:

  A. Basic skills, knowledge and personality factors necessary to become a meat cutter entry level.

  B. Manipulative skills and the necessary related technical information pertaining to

    1. The slaughtering, processing and marketing of

      a. Meats -- beef, lamb, pork, poultry, and seafoods

      b. Eggs

    2. The use, value, and care of tools and equipment used by meat cutters

  C. A new appreciation, understanding and desire to improve the role he plays in his present community or his future place of residence.

II. To familiarize trainees with some of the techniques and materials that have been recently developed by or for this industry. Emphasis given to: health requirements (plant sanitation and personal hygiene).

III. To create on the part of trainees a new insight and a desire to foster or advocate sound and acceptable

  A. Plant management procedures

    1. Labor-management relationships

    2. Product flow

    3. Cost-price relationship

  B. Marketing procedures (quality production)

    1. Products meeting "selling-appeal" of the various customers

C. Human relations principles

  1. Personal appearance
  2. Everyday manners
  3. Correct language

OUTLINE OF COURSE OF STUDY

Name of Course: Meat Processing (Entry Level)

Units	Hours	Skills to be Developed and Knowledge to be Acquired	Methods and Techniques
I. Introduction: An Overview of the Meat Processing Industry	7	1. A general scope of the meat industry. 2. Phases of meat processing 3. Purpose and responsibility of meat processors	Lecture and Demonstration
II. Care, Use and Maintenance of Tools and Equipment	16	1. Types and purposes of knives 2. Sharpening and care of knives 3. Types of machinery and equipment 4. General care and maintenance of tools and equipment 5. Correct use of specified tools and equipment	Lecture-Demon. and Lab. Exercises
III. Plant and personal hygiene	16	1. Plant physical facilities 2. Personal hygiene 3. Correct sanitary use of specified tools and equipment	Lecture-Demon. and Lab. Exercises

Units	Hours	Skills to be Developed and Knowledge to be Acquired	Methods and Techniques
IV. Maintenance	18	1. Daily and periodic maintenance of plant, tools and equipment	Lecture-Demon. & Lab. Exercises
V. Slaughtering of Meat Animals, & Poultry	65	1. Beef and Veal	Lecture-Demon.
	32	2. Lamb	
	32	3. Pork	
	16	4. Poultry	
	7	5. Seafoods	
VI. Processing	412	1. Beef and Veal 180 hrs.	
		2. Lamb 90 hrs.	
		3. Pork 90 hrs.	
		4. Poultry 40 hrs.	
		5. Seafoods 12 hrs.	
		The above prorated hours will be devoted to these phases: a. Cooling and aging b. Methods of cutting c. Wrapping and packaging d. Curing and pickling e. Freeze and drying f. Tenderizers g. Sausage h. Fancy meats i. Egg processing and storaging (grading and washing)	
VII. Marketing and Displaying	45	1. Cut out values	Lecture-Demon. and Lab. Exercises
	6	2. Pricing of meats	
	6	3. Light and their effects on meats	
	35	4. Arrangement for eye appeal and orderly sales	

Units	Hours	Skills to be Developed and Knowledge to be Acquired	Methods and Techniques
	6	5. Shelf life	
	40	6. Plant-community relationships serving customers	
VIII. Store Room Management	15	1. Inventory (supplies, tools, equipment and products sold and those on hand)	Lecture and Lab. Exercises
IX. Labor and Plant Management	12	1. Employee-employer relationships	Lecture-Demon.
		2. Employee-customer relationships	
X. Laws and Health Regulations	8	1. Health inspection -- obtaining and maintaining high sanitary ratings	Lecture-Demon.
		2. Fire code	
		3. Social Security laws	
		4. Workmen's compensation	

VI. CULMINATING ACTIVITIES

As time drew near for the closing of the program, the group seemed spurred to greater achievement. It was apparent during the last six weeks that the trainees had developed a higher self-concept--a confidence that they could do and a determination to do. This spirit was fostered by the anticipation of:

1. Taking the GED Test for a high school equivalency certificate
2. The publication of a book of autobiographies
3. A planned exhibit of work accomplished
4. The opportunity offered to speak at the Class Day activities
5. Preparation for the Graduating Exercises

An opportunity to take the General Education Development Test in order to get a high school equivalency certificate was offered the participants who measured ninth grade reading level and above. Forty-four participated.

Since the cost of the test was $8.00 each, the program offered to pay $6.00 and each participant paid $2.00. It was administered by Mr. Roland Henry from the Admissions Office, Tuskegee Institute.

Though only three performed at levels acceptable for high school equivalency certificates, all of the men who took the examination passed at least three sections and missed the other two by a narrow margin--from one to five points. Those who failed a part of the test were encouraged by the fact that they can take the test again in six months. Having passed three sections, they can now concentrate on the areas in which they were deficient. They spoke enthusiastically about trying again now that they know what it is all about. The three who passed received their certificates at the Graduation Exercises and one has now applied to enter Tuskegee Institute in September 1965 in the regular college program.

The second activity, publication of autobiographies, engendered much interest. It necessitated the incorporation of many of the essentials in English taught during the year: organization of ideas, sentence structure, spelling, punctuation, verb agreement and handwriting. Those who were unable or unwilling to write in narrative style made an outline of pertinent facts, such as: birth, family, education, travel, job experiences, hobbies, likes, dislikes and something about the past year's experience in MDTA. The writing of the autobiographies presented a challenge to the men which they willingly accepted. Even so, some were a dismal disappointment. However, there were many well-written, interesting stories told. The compilation of all of the autobiographies along with some of their favorite quotations was distributed to each trainee as a memento.

The third planned activity before the closing was an exhibit showing work done by the trainees in the areas of communication skills, mathematics and counseling. There were samples of work done at the beginning of the program and those done near the end of training. These showed tremendous progress in all areas.

Materials used during the year were displayed and demonstrated. Tape recordings were available to those who wanted to hear discussion groups. Pictures of groups of trainees at work in the various areas enlivened one section. Other pictures showed the lecturers as they spoke to the trainees at the regular Friday morning counseling sessions.

All of the work in these areas showed correlation with the various trades that had been studied. The mathematics exhibit showed how the meat processors calculated the prices of meat cuts--how carpenters learned to measure accurately and read blueprints--how brickmasons figured the amounts of materials necessary to do a job and how farm machinists calculated the time it would take certain machines to do certain jobs.

Vocabulary builders and spelling tests showed at least 100 words that the trainee had acquired in his trade area. Books that had been read on brickmasonry, carpentry, farm machinery and meat processing showed how reading had met the participant's need. A good suggested home library was also displayed.

One of the most interesting displays to visitors was that of the poetry of Acie Parker, trainee in brickmasonry, who had been inspired during the year to write many worthwhile poems. This inspiration led him to submit several poems to the Duke Record Company in Houston, Texas to be used as lyrics for songs. In April, the company wrote him saying that a song-writer was interested in his lyrics and sent him a song-writer's contract with a 50-50 percentage. A duplicate of his signed contract and a picture of him signing the contract were of special interest.

Mr. Parker wrote his first poem after a visit to the George Washington Carver Museum. Near the end of the program he wrote "Time Is Passing On," and for our closing exercises he wrote and recited "The Hour Has Come."

Time Is Passing On

We all are trying to make our grades
So we will be able to do our trades
We know in a few months we will be gone
We have to study hard because
Time is passing on.

Opportunity knocks but once they say,
It wouldn't have knocked if it wasn't for MDTA;
The chance that we have will soon be gone
We know that
Time is passing on.

Our instructors have scuffled very, very hard
So we can do well on our MDTA jobs
We will miss our instructors when we have gone
But we cannot tarry
Time is passing on.

-- Acie Parker

Other original work on exhibit included a paper by Jesse Provitt, a trainee in meat processing, who wrote "Head 'Um Up! Move 'Um Out!"

George Ivey, a trainee in brickmasonry wrote:

The Singing Trowel

I love to hear my steel trowel ring
It sounds as if my name it sings
And when it comes to reading a rule
It's much easier than plowing with a mule.

I was sitting down doing nothing one day
When I got a letter inviting me to the MDTA
Since an opportunity won't come and wait
I came to Tuskegee before it was too late.

When I came here, I didn't know
How to lay bond bricks straight in a row
Now at this time, just look what I've learned
To lay bond over bond for the money I earn.

I am asking you new men to do the same
Be uplifted when they call your name
So I am telling everybody that I see
To do just as I did when they called on me.

Striving To Do Our Best

I came to Tuskegee with two bare hands
I'm trying to do the best I can
I do hope by the end of next May
I'll be able to earn a worthy pay.

We all should do the best we can
One day we'll be in demand
Then with the trade we have in hand
We'll have fewer problems as a man.

I told the people at home I would be
As proud as the people in Washington, D. C.
By the time this is over, the end of next May
There is no doubt, I can make a good pay day.

I do hope we'll all be glad, and
The people in Washington won't be sad
But they will give Tuskegee order to send
For a larger number of unskilled men.

-- George Ivey

Mr. Ivey said, "It never occurred to me to write anything. I didn't think I had any ideas that would interest somebody else. But now I like it. I write things for my kids and they think I'm great."

The exhibit was a focal point of interest to the many visitors throughout the final week. As the trainees proudly pointed out their achievements to their relatives and hometown friends, there was a feeling of satisfaction with a job well done.

In cooperation with the trainees, a Class Day program was planned which was done entirely by the trainees themselves. Accordingly, each trade group voted for a speaker, and an alternate in case of illness, to represent them at the Class Day exercises.

It was generally agreed that the speeches should bring out the highlights of the year in each area. Through classroom discussions, members of the class contributed what they believed to be the most interesting aspects of the MDTA Program. The elected speakers then wrote their speeches and read them to the class, at which time they were either approved or were given suggestions to improve them.

It is interesting to note that two of the speeches were written and delivered by Trainees not elected by the group, but who were so enthusiastic about the MDTA Program that they wrote papers for their own satisfaction. These speeches were so impressive that room was made on the program for them to be delivered. (See speeches by Hosea Montgomery and King George Thornton.) Mr. Montgomery's speech was selected to be repeated on the graduation program.

In planning the program, all of the talent among the trainees which had been uncovered during the year was sought. Charles Nixon, a trainee in carpentry, who was found to have great artistic ability, designed and painted a mural background for our closing exercises. This picture showed a man entering a door over which was written "Open the Door to Better Living Through MDTA." Each trade area was represented on the other side of the door. It made a colorful and meaningful background. Alvin Martin, a trainee in brickmasonry, whose beautiful voice was heard throughout the year was selected to sing the solo, "He" which drew tremendous applause. Calvin Sears, trainee in brickmasonry, whose hobby is driftwood floral designs, made all of the stage decorations. Matching popular artists in harmony was a quartet who closed the program with an appropriate song, "Now Is The Hour." As the quartet harmonized softly in the background, Acie Parker recited a poem which he wrote especially for the occasion.

The Hour Has Come

The hour has come for us to go
How much we will miss you--you'll never know
We really hate to say "goodbye"
So please understand our reason why.

We have to be leaving; won't you understand?
We have to be placed on jobs throughout the land.
We were happy for the MDTA, you know
We know the instructors hate to see us go.

Twelve months have been a very long time.
We are going back to our loved ones we left behind
The time has come and we shall go
We'll miss the ones who have helped us so.

We have worked so very, very hard
We know you'll be proud of us on the job
So--without saying any more,
The hour has come for us to go.

--Acie Parker

The Class Day Program which was held on Friday, May 21, was arranged in two parts. The morning program consisted of demonstrations in the four trade areas. The brickmasons built an ornamental wall in which the letters MDTA were arranged in contrasting bricks. The carpenters completed the side of a house into which they had put a window frame. The meat processors cut up a hog and displayed the various cuts of meat. The farm machinists drove a tractor onto the stage and demonstrated the parts and the maintenance procedures. Each demonstration was accompanied by a narrator selected from the group.

Following the demonstrations, everyone viewed the exhibits then moved to Willcox Auditorium where Dr. C. G. Gomillion, who was introduced by one of the trainees, lectured on "Civic Responsibility." Then all dispersed for taking pictures and for lunch.

After lunch, the afternoon program with the prepared speeches and musical selections was enthusiastically received and greatly enjoyed by all.

On the following Friday, the graduation program was held in the Auditorium of the College Union Building at Tuskegee Institute. Mr. Manuel Eber, OMAT, Washington, D. C., gave the address. Dr. Arenia C. Mallory, Program Officer, MDTA, received an award and gave words of encouragement to the graduates.

Following the graduation ceremony, a reception was held in the same room. Punch and cookies were served from a beautifully decorated table and the trainees proudly introduced their wives and children who had come for this occasion.

Amid handshakes mingled with tears of appreciation and joy, the men departed for their homes. As we watched the last car leave the campus, we hoped with all our hearts that this year's experience would bear fruit and be instrumental in bringing a more successful and happy life to our participants.

TUSKEGEE INSTITUTE

MDTA EXPERIMENTAL AND DEMONSTRATION PROJECT

COMMENCEMENT EXERCISES

College Union Auditorium
Friday, May Twenty-Eighth
Nineteen Hundred Sixty-Five
Ten O'Clock

PROGRAM

Chairman		Dr. A. P. Torrence Dean of Academic Affairs
Invocation		The Reverend Willie Adams Trainee in Meat Processing
Solo	"He"	Mr. Alvin Martin Trainee in Brickmasonry
Introduction of Speaker		Dr. L. H. Foster President, Tuskegee Institute
Address		Mr. Manuel Eber OMAT, Washington, D. C.
Presentation of Certificates		Dr. T. J. Pinnock Associate Director, MDTA
Presentation of High School Equivalency Certificates (GEDT)		Mr. Preston E. Torrence Assistant Associate Director, MDTA
Appreciation on Behalf of Trainees		Mr. Hosea Montgomery Trainee in Brickmasonry
Introduction of Guests		Dr. B. D. Mayberry Dean, School of Agriculture
Presentation of Award to Dr. Arenia C. Mallory, Program Officer, MDTA		
Remarks		Dr. Arenia C. Mallory
Remarks		Dr. L. H. Foster
Musical Selection	"Now Is The Hour"	MDTA Quartet

The narrator is Mr. Acie Parker, a trainee in Brickmasonry.
Mr. Parker wrote the poem that accompanies this selection.

Benediction	The Reverend Willie Adams

Brickmasonry

Baker, Willie
Beavers, Jason
Bennett, James
Brown, Suddie
Bryson, John
Butler, Golden
Carter, Leroy
Clark, Jacob
Cooks, Rufus
Floyd, Theodore
Floyd, John
Grayson, Sam
Hampton, James
Hardaman, Will
Harper, Clifford
Hubbard, Micheal

Ivey, George
Jones, Jestover
Jordan, Billy
Jordan, General
Judkins, Garfield
Leonard, Posie
Love, Daniel
Martin, Alvin
McElderry, Arthur
McKeithen, Robert
Montgomery, Hosea
Mosley, William
Nunn, Breman
Parker, Acie
Pearson, Willie
Pleasant, Charles

Powell, Eddie
Ray, Charles
Sanford, Hiton
Sears, Calvin
Smith, Edward
Stanberry, James
Stewart, Turner
Stockdale, Lee
Thornton, King
Tucker, John
Watts, Charles
Williams, Beal
Williams, Johnny
Willie, Nathan
Willis, Theodis
Wright, Tommie

Carpentry

Benion, Jessie
Boyd, Willie
Brown, Cleveland
Burks, Marion
Calloway, Charlie
Clansy, Clemon
Colston, David
Conley, Richard
Conway, Willie
Corbitt, Eddie
Dowdell, Jimmie
Foster, Paul
Graves, Robert

Hargrove, Leroy
Heard, Edward
Howard, Mose
James, Johnnie
Jerido, Samuel
Jordan, Benjamin
Leonard, Oliver
Marsh, Ben
McCray, Robert
McGlowan, J. P.
Mitchell, Willie
Nixon, Charles
Penn, William

Purnell, Isaac
Ruffin, John
Seymour, Willie
Scott, Charlie
Sinclair, Eddie
Smith, Robert
Sprattling, Clanton
Stevens, Lawrence
Streeter, Willie
Thomas, Oscar
Tyson, Johnny
Williams, Ray

Farm Machinery

Allen, Raymond
Andrews, O. D.
Bailey, Crutis
Baker, William
Brown, Cleo
Calloway, Otis
Chambers, James
Collins, Price
Dale, John
Ezell, Calloway
Foxx, Albert
Garrett, Bennie
Griffin, Talc
Hampton, Jessie
Harris, James
Hayes, Paul
Hines, Johnny
Ingersoll, Lawrence
Jackson, Luther
Jenkins, Albert
Lewis, Richard
Magwood, Jobie
Maloy, Jimmy
Nettles, Henry
Petway, Willie
Robinson, Frank
Rodgers, Johnny
Ross, James
Settles, Jimmy
Terrell, Curtis
Thompson, James
Walker, Karey
Whitlow, Nathaniel
Williams, Andrew
Woods, James
Wright, Ira

Meat Processing

Adams, Willie
Arnold, Harold
Akins, Elbert
Baker, Lester
Banks, James
Brown, Grady
Burton, Willie
Calloway, Major
Carter, Willie
Cephus, John
Chabliss, Walter
Crittenden, Augustus
Dubose, Daniel
Edmonson, Robert
Frye, B. T.
Gray, Jessie
Haile, Joe
Harris, Albert
Harris, Curtis
Harvey, Benjamin
Howard, Albert
Hughley, George
Hunter, Johnny
Jefferson, Richard
Jinnis, Cleveland
Johnson, Pearl
Jones, Samuel
Kelly, Jimmie
Knight, Horace
Padgett, Robert
Pogue, Raymond
Porch, Louis E.
Provitt, Jessie
Rawls, Ralph
Richardson, Hugh
Ross, James
Smith, Julius
Taylor, Eleazer
Wilkerson, George
Williams, Arthur
Williams, Ernest
Wynn, Willie
Yeldell, James

High School Equivalency Certificate (GEDT)

Beavers, Jason
Burks, Marion
Provitt, Jessie

Acknowledgments:

Mural Design . . . . Mr. Charles Nixon, Trainee in Carpentry

Floral Decorations . . . . Mr. Calvin Sears, Trainee in Brickmasonry

Music . . . . Mrs. June B. Carter, English Teacher

The following speeches were given by selected trainees during the Class Day activities and Graduation Exercises:

"Now that the time to leave Tuskegee Institute and the MDTA Program is approaching, we must take stock of ourselves. The trainees will leave here and go to different parts of the state and the country. How well they've been trained and how we adapt ourselves will reflect on how successfully we've absorbed our training. It will also reflect on Tuskegee Institute.

"Tomorrow, we will face various problems and challenges. Just how well we cope with them will depend heavily upon our character and attitudes, along with our shop training. We must be able to make living conditions around our homes and communities better than in the past.

"What is the greatest challenge that we will face tomorrow? Will it be ourselves? Has our stay at Tuskegee Institute enabled us to make a living for our families? Are we willing to intelligently accept responsibility?

"We have been guided along the path toward a better tomorrow. We have received instructions about several things by a very capable MDTA staff. But for someone to actually pinpoint our future needs or reveal unto us what problems we'll face is highly improbable.

"We must continue preparing ourselves. Let us not stop looking upward, with the termination of this training period. Our families and future MDTA Programs are depending on our best. We must not let them down.

"As complex as our world is today, with automation and technological advances, we will have to keep up with the times.

"In the past, all one had to do was have a strong back and follow orders to hold a job. Now it is imperative that we use our brains.

"No longer will a person have the color of his skin to hide behind, or to cry discrimination when he or she is fired for "botching" a job.

"Fellow trainees, we must be the best in our respective fields; let us strive to produce more and better work than anyone else. We must be the best.

"We who have studied Carpentry, realize that we are not journeymen carpenters yet, but one day we will be.

"We hope that some of the cultural aspects of Tuskegee Institute will be reflected in our later lives and in the lives of our children.

"We have had the opportunity to hear concerts and lectures and have observed nearly all of the interesting sights around this famous place of learning.

"Our Carpentry shop training has provided us with some basic knowledge essential for every skilled carpenter. In addition to this, we have learned how to obtain good tools, and the value of taking care of them properly.

"As a result of our mathematics classes, we've learned to calculate numbers correctly, which is essential in all skills.

"Through the study of English, we've learned to communicate our ideas. We went on several trips on campus which incidentally grew out of our English classes. We have seen the magnificent Carver Museum where the works of Dr. George Washington Carver are displayed.

"We have seen the Oaks, the home of Booker T. Washington, Tuskegee Institute's founder and first president. We also learned the right way to use the facilities at the library. Other places of interest were the School of Veterinary Medicine and the Veterans Hospital.

"Because of the constant counseling that we've received, we have learned to meet new challenges with reason and self-confidence. The Lord Jesus Christ instructed His disciples before He went to His Father to go into all the world and preach My gospel.

"May God bless all the MDTA officials and trainees, both now and in the future. We hope that the future trainees will enjoy and profit from an instructive training period as much as we have. Fellow trainees, we must not fail to meet the challenges of tomorrow; for if we fail we will have failed everyone who has had faith in us; we will have failed ourselves.

"Let us vow to honestly accept our responsibilities and meet all our obligations.

"In conclusion, let us promise to produce top quality workmanship. We must continue to study and learn more about our trades. We must maintain the highest possible moral conduct. We must accept the opportunity to excel. We must take advantage of it. We must be the best; we will be the best."

-- Marion Burks, Carpentry A

"Faculty members, officers, ladies and gentlemen. Some three hundred days ago, I was one of one hundred and seventy odd men about to embark upon a course of valuable training at this institution.

"It is an encouraging observation when men with little or no formal training effect measurable accomplishments, especially in such a small amount of time.

"The hands and mind working coordinately, it is observed, can accomplish much.

"This statement certainly holds true in our shop class, you can tell by the progress in skill that the men in our group have made with the tools of masonry.

"These statements would not be complete without adding that the competent teachers and instructors have done a tremendous job, and they, too, have learned something.

"It is well for all men, when trying to improve, to improve all aspects of the man. The lectures given to us by professors of many walks of life through this period of training have afforded us much gain.

"All of the additional information hereby gained has done immeasurable good.

"This year has been a profitable one, not only in mathematics, English language, and our trades, but in meeting new friends and their families, learning to understand people with views different from our own, standing together in times of crisis, and being able to lose one's temper without losing one's character.

"Each experience mentioned is a topic within itself. Truly, this has been a fine year of activity. To me, this day will remain a memorable one that rates along with those of the highest experiences that I have ever had--even the birth of my fine, fat-jawed baby boy.

"Ladies and gentlemen, some three hundred days ago, I was one of one hundred seventy odd men about to begin some valuable training at this institution.

"Before closing, I, like my fellow students, have many people to thank--all the way from the heads of our democratic government to the leaders of this community, and to all seeking a better life. To these people, we say thank you."

--Jason Beavers, Brickmasonry A

"Gentlemen, in a democracy such as ours, the basis of each man's responsible participation is preparation. This preparation is obtained through education. The aim of our society is to provide this education without restrictions to any. Unfortunately, many variables intervene and the objective is never fully realized.

"This deficit between ideology and reality affects us politically, socially, and economically.

"Programs are being formulated to bridge this gap. MDTA is one of these.

"We are appreciative for such a program. Our appreciation stems from the knowledge of the many benefits that have been and will be reaped from the program by those who participated fully and gave of themselves to obtain a wealth of information. It is an appreciation that is derived from an awareness of the program's ability to inspire one to even higher levels of achievement.

"We are grateful for an opportunity to improve ourselves, and for a basis from which to contribute more significantly to our society. For with the obtaining of new skills to compete economically, come many other changes. There are changes in attitudes and values which if channeled properly are assets to society.

"In perhaps the most used words of the English language, I, on behalf of my classmates, thank you."

-- Pearl Johnson, Meat Processing A

"Platform guests, ladies and gentlemen: Since a great number of the 180 trainees who entered this experimental and demonstrational project were complete strangers to each other, there soon arose the need to have one representative group of trainees to regulate and advance the welfare of all of the trainees.

"Thus, the Counselor Director guided us in organizing the Tuskegee Institute Chapter MDTA Trainee Association. All well-organized groups and clubs develop and adopt a constitution; so did this organization.

"Our constitution states very definitely the purpose, which is: 'To serve as a liaison between the trainee and faculty administration and to represent the interests of all trainees enrolled in this project.' Special emphasis was given to the trainee's dormitory life, his social and cultural affairs, and his financial problems.

"One of the main outgrowths of this organization was the formation of a credit association which was named: Tuskegee Institute Trainees' Credit Association. Since the Credit Association was designed to serve a definite purpose for the trainees, rules and regulations similar to the Federal Credit Union were developed and adopted. The main objective of the Credit Association was to develop in the trainees an awareness of and appreciation for the wise use of money.

"More specifically, the objectives are:

1. To assist trainees in developing the habit of saving.
2. To help trainees to meet their obligations and to be able to solve money problems with dignity.
3. To have loans tailor-made to fit the borrower's needs, his capacity and ability to repay.

"I would like to introduce to you those persons from the trainee group who have willingly given of their time and efforts to serve as officers of the Association and its various committees. First, I shall present the officers of the MDTA Association: (Please do not applaud until everyone has been introduced.) President, Michael Hubbard; Vice President, Robert Edmonson; Secretary, Marion Burks; and Treasurer, King Thornton.

"Now I should like to present to you the trainees who served as the Screening Committee of the Credit Association. I, John Dale, Jr., served as President; Mose Howard, Secretary; Arthur McElderry, Treasurer; and as Examiners, Grady Brown and Johnny Williams. I am sure that I speak for the entire trainee group when I say 'Thank you for your loyal, diligent and untiring service.' Thank you, gentlemen.

"As with any group, working relations are not always harmonious. We have been praised; we have been criticized. Notwithstanding these criticisms, we stuck to our better thinking by not permitting trainees to borrow money for unwise purposes. Also, I should like for our friends to know that in a great number of instances we went far beyond our duty to assist the men whose checks didn't arrive on the specified payday. We also came to the aid of trainees in various types of unforeseen emergencies.

"We could not have done this without your cooperation. We, the officers, are very appreciative for the large number of trainees who saved from $50 to $100, and those of you who saved over $150, which we were able to use to assist our fellow trainees in their financial problems. I venture to state without reservation that if this organization had not been put into force, the chances are great that a large number of us may have had to withdraw from this project. So, fellow trainees, thanks to you for making the Tuskegee Institute Chapter MDTA Trainee Association such a success.

"Ladies and gentlemen, the experiences we have had during this year of training have helped us in many ways. We have learned to live and work together harmoniously. For unless we know how to get along with our fellowman, no amount of training in the world can insure success."

--John Dale, Jr., Farm Machinery A

"It was a warm, sunny day, the first of June, when we started our hike up the mountain of higher learning. Entering Tuskegee Institute as the unskilled patriots, we were 180 frightened, nervous, and determined individuals grasping for higher ridges. Good leadership was necessary to guide us safely over our twelve-months' journey. So keeping in trend with the rules and regulations here at Tuskegee, it was necessary for certain officers to be elected, such as: president, shop foreman, dormitory guards, etc. It was also essential to establish a Credit Loan Association which played a tremendous part on this twelve-months' journey.

"The beginning of this hike to some, however, was a difficult one. To others, it was to please their curiosity about the program and to let them take a vacation from the streets and corners whence they came. And to others, it meant a chance to get out of the old rut and cut a new one toward success. I believe in the success of this MDTA program and that it shall prosper in proportion as we trainees learn to put more knowledge and skills into our trades. As we are marching up to this twelve-months' junction, let us not think in terms of stopping in the intersection, taking a rest, but think in terms of acquiring another pace--not a pace that will offset the primary objectives of this program, but a pace that will indicate to others the importance and necessity of this hike, so they will be influenced by our marching.

"What we have learned from our noble instructors and well-trained leaders here at Tuskegee will be our road map to continue this courageous march individually when we leave here. If we have not received our map by this time, I am afraid our hike will have been in vain. But if we have received it, I believe that there is success somewhere waiting for us.

"To the brickmasons, carpenters, farm machinists, and meat processors, you will find genuine pleasure on this hike if you will only equip your pack with the necessary tools that it will take to do a velvet-smooth job. Keep with you at all times somewhere in your grip, hospitality, punctuality, courtesy and discipline. The atmosphere is going to change in different localities, but we must think in terms of offering and giving services, instead of receiving it. This can be done easily--brickmasons, by the singing of your trowels; carpenters, by the ringing of your hammers; farm mechanics, by the tunes of your engines; meat cutters, by the continually paring of your knives.

"As we continue this hike toward success, let each of us remember it is not the one who starts and stops, but the one who holds out and endures unto the end; the one who may stumble and even fall, but who gets up, brushes off the hurt and keeps on striving for a higher goal.

"Before closing, I, like my fellow students, have many people to thank for this wonderful opportunity; all the way from the heads of our democratic government to the leaders of this community, and all those who seek a better life. To these people we say -- thank you.

"In conclusion, may I offer this toast to my fellow classmates:

May good fortune find your doorway,
May success yours always be.
May no trouble travel your way,
But happiness come to thee.
May your headaches be forgotten,
May no tears be spilled,
May old acquaintances be remembered,
And your aspirations filled.
And may you always be sweet dreamers,
May your wildest dreams come true.
May you find the love for MDTA
Ever following you.

-- Hosea Montgomery, Brickmasonry A

"Guests, faculty members, classmates and friends: We stand today on the threshold. Behind us are years of preparation for this day. Ahead of us is the wide, untravelled road of our future, marked only by our own decisions and our own consciences. We cannot turn back, we must step out of the door, and into the wide open space. The swift swirling era of tomorrow compels us to have clear and progressive thoughts.

"Because we have completed one small phase of the endless process of learning, we cannot harbor the fuzzy reasoning of considering ourselves educated. Although for some, this closing may mark the end of formal classes, it does not mean that learning and growth and maturity should also cease. We must keep our minds very alert and inquiring and our hearts receptive and understanding. Some of our classmates will have the benefits of higher education at colleges, where they will be stimulated by the contact of mighty minds, and find new experiences in the exchange of ideas with new friends.

"Regardless of the path we choose, we must grasp and hold fast to that which is worthy, that we may find a measure of satisfaction and a life of fulfillment. We realize that the road ahead may be rough and steep, and that the horizon may be clouded with uncertainty. We must travel slowly and steadily, certain that success will follow hard labor. The preparation for this journey into life has been a continuous process over the years, especially for the past twelve months. It has been cushioned by the fine education that has been vested in us by you, our parents, teachers and friends.

"We are grateful for your guided thoughts and concepts of values. May we express our thanks to you by using our learning, to live to the fullest the life which nature has given us.

"Classmates, my last words must be to you; we've had a wonderful time here together; we've shared many joys and sorrows, triumphs and disappointments. Now as we separate, each going his own way, may we carry with us memories of life here in Tuskegee, and ever strive to be a credit to our community, our state and our nation. Thank you."

-- King George Thornton, Brickmasonry

OPENING PRAYER

GRADUATION EXERCISES

Almighty and everlasting God -- Be Thou present with us in all of our duties and grant us the protection of Thy presence. O God, we thank Thee for Thy many blessings. As we depart, we pray that the time we have spent here will not have been in vain, but will enable us to be the better citizens of tomorrow. We pray that Thou would bless our families with Thy gracious favor. Behold our colleges and schools that knowledge may increase among us and all good learning flourish and abound. Bless all who teach--and all who learn and grant that in humility of heart, they may ever look unto Thee, Who art the fountain of all wisdom. Through Jesus Christ our Lord. Amen.

BENEDICTION

As we depart, O Lord, we pray that Thou would watch over us during the night and bring us to a new day with renewed spirit and blessed hope. And may the Grace of our Lord, Jesus Christ, be with us all now and forever more. Amen.

-- Willie Adams, Jr., Meat Processing A

VII. COUNSELING

The counseling program associated with this project covered the following phases:

A. Group counseling

B. Individual counseling

C. Dormitory counseling

D. Family counseling

A. Group Counseling

Group counseling sessions were held on Mondays through Thursdays from 11 A.M. until 12 noon. Each trade group had a special day:

1. Carpentry A and B -- Monday
2. Brickmasonry A and B -- Tuesday
3. Farm Machinery A and B -- Wednesday
4. Meat Processing A and B -- Thursday

Some of the subjects presented and discussed included:

1. Analysis of self
2. Raising aspirational levels
3. The value of training and self improvement
4. Orientation to the employment service
5. Understanding the laws of supply and demand in terms of opportunities for employment
6. Skills in applying for a job
7. Holding the job
8. The economics of the wage earner

These and similar subjects were covered in order to give the trainees sufficient knowledge and help them to operate efficiently.

In an effort to supplement the information and experiences gained in regular classes and counseling sessions, a lecture-discussion series for the entire group was initiated in cooperation with the counselors. During these sessions, which were held every Friday, many local leaders from Tuskegee Institute campus and from the Tuskegee community discussed various topics related to the trainees' general interest and welfare. The objectives of the lecture-discussion series were:

1. To emphasize the major purpose of the MDTA Training Program.
2. To develop an awareness of the opportunities in employment available to persons possessing employable skills.
3. To develop an understanding of why trainees should use available help in making the best of the available opportunities.
4. To outline some effective methods and procedures for using available opportunities advantageously.
5. To develop a realization that one can improve to the point of making significant contributions to oneself, one's family, and one's community.
6. To motivate the trainees to get as much as they possibly could out of this training program.
7. To effect a sense of responsibility, dependability, and honesty in the trainees.
8. To develop an understanding and an appreciation for the wise use of money.

9. To develop an awareness of and an appreciation for higher values related to purposeful living.

10. To develop an awareness of civic opportunities and responsibilities and to encourage trainees to face up to these with dignity.

The lecturers and their subjects were:

1. "The History and Projection of Tuskegee Institute" -- Mr. James Woodson

2. "What the MDTA Program Means to You" -- Mr. L. A. Potts

3. "Health and Sanitation" -- Dr. Poindexter

4. "The Importance of Learning" -- Dr. Eubanks

5. "An Explanation of the 1964 Civil Rights Act" -- Dr. Richard Wasserstrom

6. "Motivation vs. Complacency" -- Dr. Queen Shootes

7. "Outgrowths of Meaningful Education--The Need for Getting the Most Out of Training" -- Dr. B. D. Mayberry

8. "The Relationship of Honesty, Responsibility and Dependability to Job Success" -- Dr. Daniel Wynn

9. "The Wise Use of Money--What it Means--How It's Done" -- Dr. George Dowdy

10. "The Meaning of Purposeful Living" -- Dr. Raymond F. Harvey

11. "Facing the Challenge of the Future" -- Dr. A. P. Torrence

12. "Civic Opportunities and Responsibilities" -- Dr. C. G. Gomillion

Each lecture was followed by a question and answer period, and many trainees raised pertinent, thought-provoking questions.

In addition, educational movies were shown on Thursday afternoons from 4:00 to 5:00 P.M. These movies were a means of developing wholesome attitudes as well as a source of valuable information; for it must be remembered that not only was it necessary for the men to gain knowledge and develop a skill, but they had to develop also desirable work habits and a will to do. Along with the will to do comes a need for a sense of responsibility to do the job well.

Some of the educational movies included:

1. Steps to Jets
2. Hands of the Master
3. Project Hope
4. Collectors' Item
5. Beyond the Valley
6. Credit -- Man's Confidence in Man
7. Out of Darkness
8. Bridge of Friendship
9. Bridge of Tomorrow
10. Dialogue with Life
11. Drivers' Education Unit
12. Petrified River
13. Fury of the Winds
14. Water Bill U.S.A.
15. Time of Our Lives
16. A Better Way
17. The Human Element
18. Welcome to Washington

B. Individual Counseling

Dr. McEnge was the project's number one "trouble shooter" in cases where the trainees became involved with the law or where they had family problems which more often than not necessitated making home visits. Mrs. Stephens and Mrs. Elsberry used the Mooney Problem Check List, information from the teachers, and other relevant data as a base from which to counsel the trainees.

One of the problems requiring individual counseling was that of absenteeism. Absenteeism and requests for excused absences became rather frequent during the third, fourth, and fifth months of this project. The reasons given for being absent or getting excused from class reflected their pattern of living and indicated a wide range of problems which required special counseling. Among the reasons given in requesting excused absences were:

1. To sell automobile in order to obtain cash needed to pay some of the "past due" bills.
2. Car trouble--automobile in which he was riding or driving broke down while enroute to school.
3. Marital problems:
    a. Trainee's mother and wife had a misunderstanding which necessitated his moving from his mother's house.
    b. Trainee's wife left home and children and went north to get employment. He had to find someone to care for the children.
4. Family troubles:
    a. Trainee had to rush home to take son, who had broken his leg, to the hospital.

   b. An 18-month-old son had to be transported to the crippled children's clinic while the wife remained at home with their 6-weeks-old child.

   c. A three-year-old son had to be rushed to the hospital for an emergency operation.

   d. Trainee had to take his 74-year-old mother to the hospital because she suffered a stroke the previous evening.

5. To appear in court as a witness; to appear in court for a traffic violation during the week-end.

6. To attend to personal affairs:

   a. Make new arrangements with his creditors

   b. Find a cheaper house for his family

   c. Assist in putting roof on his rented house

7. To carry his cotton to town for sale in order to settle farm debts.

8. Infected hand or foot; pain in back; high temperature; stomach ulcer; toothache

9. To attend funeral--relative or close friend

10. To obtain cotton acreage allowances. (Several trainees had to be excused from classes to file their 1964 application--Intention to Participate Application for Payment of Diversion of Acres, U. S. Department of Agriculture Feed Grain Program.)

11. To return home for one or more days to assist in the gathering of their cotton and corn crops.

One case involved a trainee who asked for leave of absence for a week to go home and gather his corn crop. He is the father of eleven children: seven girls whose ages are 16, 14, 11, 9, 7, 3, and one month, respectively; and four boys, whose ages are 15, 8, 5, and 2 years, respectively. He stated that his children had gathered most of the cotton but he would prefer that his daughters not have to gather the corn. He was willing to relinquish this request if it would interfere too much with his training; but since this trainee had a good record of attendance and accomplishment, this leave was granted. Upon his return to the campus, he immediately started extra work to make up class assignments that he missed while on leave.

As a result of concerted efforts and counseling, we were able to assist the trainees in improving their socio-economic patterns of living and the request for absences decreased. In addition to absenteeism, dropouts presented problems which called for inspired counseling and guidance.

As has been stated, 180 persons were initially enrolled because a high dropout rate was anticipated. The dropout rate, however, was not as high as expected and 166 completed the year--more than the anticipated base number of 160.

One trainee dropped out because he obtained a good job, one that he liked and wanted. He was employed by a nationally known trucking company to drive from New Orleans to California and back. The pay was good, and, as he said, "I like to hit the road."

Illness was the cause of another dropout. The participant had diabetes but refused the diet recommended and offered by our "Special Services" at John A. Andrew Hospital on the campus.

Death in the family caused another trainee to drop out. The death meant added dependents and responsibilities. He was needed at home.

Inability to overcome the habit of alcoholic drink was responsible for other dropouts. In such cases help was given in either referring them to Alcoholics Anonymous or in getting hospital treatment.

Financial problems led to the formation of the Tuskegee MDTA Trainees' Credit Association. The main objective of the Credit Association was to develop in the trainees an awareness of and appreciation for the wise use of money. More specifically, the objectives were: (1) to assist trainees in developing the habit of saving, (2) to help trainees meet their obligations and be able to solve money problems with dignity, and (3) to have loans tailor-made to fit the borrower's needs, his capacity and ability to repay.

A screening committee, composed of trainees, reviewed requests for loans. It was their duty not to permit trainees to borrow money for unwise purposes. Where necessary, however, they went far beyond their duty to assist the men whose checks didn't arrive on the specified payday.

This association came to the aid of trainees in various types of unforeseen emergencies. It might be stated without reservation that if this organization had not been formed, the chances are that a large number of trainees may have had to withdraw from the project.

All of the trainees were encouraged to save a dollar a week; a large number of them saved even more. By the end of the year some trainees had saved as much as $150. All who had borrowed repaid before leaving, and all things being equal, this was a very successful venture.

C. Dormitory Counseling

This aspect of the counseling concerned itself only with resident trainees. Mr. Leonard Fitts and Mr. Elijah Pitts, mathematics teachers, lived in the dormitories with the trainees. Mr. Fitts holds a Masters Degree in Guidance and Counseling, in addition to his training in mathematics.

The evaluation sheet on the next page shows the instrument used to collect information which was used as a basis for dormitory counseling.

The data collected on this instrument may yet lend itself to extensive investigations. If wide variations in the men's activities are identified, every effort will be put forth to determine what characteristics in the resident trainee can be associated with their patterns of behavior in the dormitory.

TUSKEGEE INSTITUTE

RESEARCH, EXPERIMENTAL AND DEMONSTRATION PROJECT

Weekly Evaluation Sheet -- Campus Trainee

Week of __________ Emery Three Counselor Leonard Fitts

Directions: Please rate each trainee in your Emery from 5-1 as indicated on the legend according to his room cleanliness, conduct in the building and his personal habits. Indicate weekend activities with a (✓) check in the appropriate space.

Legend
TN - Trainee Number
5 - Excellent
4 - Good
3 - Fair
2 - Poor
1 - Unsatisfactory

Trainee	TN	Room Mates No.	Room No.	Room Condition-Cleanliness & Order	Conduct in Building	Personal Habits	Week-end Activities-Indicate with (v) check						
							Attended Campus Activities	Sunday School	Chapel 10:00	Vesper 6:00	Church in Community	Visited Family	Other Specify
Andrews, O. D.	4	104	4										
Arnold, Harold	5	156	1										
Baker, Lester	7	145	6										
Brown, Grady	18	45	5										
Conley, Richard	38	43	11										
Dale, John	43	38	11										
Dubose, Daniel	45	18	5										
Ezell, Calloway	48	169	10										
Ingersall, Lawrence	80	127	3										
Magwood, Jobie	104	4	4										
Provitt, Jesse	127	80	3										
Smith, Edward	145	7	6										
Stewart, Turner	151	164	9										
Thomas, Oscar	156	5	1										
Thornton, King	158		7										
Watts, Charles	164	151	9										
Williams, A. J.	169	48	10										

D. Family Counseling

The need for extensive and intensive family counseling was very evident at the beginning of the project. Unfortunately, this type of counseling was not immediately available because of lack of staff. Every conscious effort was made to find qualified persons to fill the counseling positions but it was not until relatively late in the project that all the counseling positions were filled; therefore, in the circumstances, family counseling was not done in its entirety. Even though it was not done in its entirety, that which was done played a vital role in holding many trainees in the program and more so in tranquilizing frustrated wives and children.

Interestingly enough, most of the family counseling that was done was carried out on the campus. Wives of the trainees were never afraid to come to the campus and discuss with the counselors all family problems. Many times they were charging their husbands for not doing something which they wanted done for the family; and in many instances they charged the husband for spending his allowance foolishly. Sometimes these charges seemed to be valid, but more often than not, the wives' expectations were over and beyond what the husbands could do and more than the wives were accustomed to before the husbands enrolled in the program.

The implications here are farreaching, wives and children who were apparently satisfied with their lot of deprivation proved that they were not really satisfied. Their aspirations spiraled like a missile moving off its launch pad and although their aspirations were premature, it gave the investigators hope not only for the trainees involved, but for the entire family. Subsequent events have led the investigators to believe that many of these families will grow--grow not in terms of size but in terms of realistic aspirations and in terms of achievements. Several of these families have been relocated by the Labor Mobility Program and few have been relocated at their own expense. Families are desperately in search of a better life, a life away from rural poverty, a life that offers hope in terms of socio-economic improvement and education for their children. A year ago, the foregoing statement could only be made in theory; today it is no longer theory, it is a reality.

The writers fervently believe that with the limited counseling that the families have gotten, along with the skills the trainees have achieved, a better life is forthcoming and families will grow in terms of the expectations of the Great Society.

VIII. JOB DEVELOPMENT AND PLACEMENT

The job development phase of the Tuskegee Institute Experimental and Demonstration Project has been in operation since June 1, 1965. It has proved to be quite an educational and challenging experience for both the job developers and the potential employers.

As job developers, they learned that discipline was their most important ally. This was necessary due to the variety of conditions and attitudes that are still prevalent in the State of Alabama concerning the employability of Negro males. It was often necessary for them to patiently listen to a stereotyped monologue about the unreliability of the Negro male as an employee, as well as the history of past experiences the employer had in this type of relationship. However, they found if the potential employer were given sufficient uninterrupted time to complete his monologue a certain rapport had been established that more or less laid the framework for their discussion of job opportunities with his company. Usually, at this point in the conference they were able to present the "new image" of the Negro male as an employee.

In addition, they found that most potential employers, regardless of the remoteness of the locale had some knowledge of Tuskegee Institute and its educational program; but had little or no awareness of the MDTA Project. This presented the job developers with a much welcomed challenge. They had an opportunity not only to sell the MDTA trainees as potential employees, but also an added responsibility to explain the purpose and objectives of the MDTA Project.

The job development team is composed of two job development officers and one job development counselor. The three persons work closely together in coordinating all areas of the job development aspects of the program.

Job development consists mainly of the following four phases:

A. Initial Job Development Contact

B. The Interview

C. Job Placement

D. Follow-up

A. Initial Job Development Contact

At the outset initial contacts were made by letter. These letters were sent to potential employers covering the four trade areas and the Employment Service throughout the State of Alabama. This letter served two purposes. First, it explained briefly the Tuskegee Institute Experimental and Demonstration Project; second, it requested consideration for employment of trainees who had successfully completed the course.

Initial contacts were concentrated in the State of Alabama because it was strongly believed that it was the job developer's responsibility to try and place Alabama trainees in their native state prior to exploring job opportunities outside of the state.

Response to the letters was slow and it immediately became apparent that the job developers would have to make personal contacts with potential employers and the Employment Service. This method proved helpful in that it allowed for extensive discussion of the program and of the trainee who might be considered for employment.

At the end of each discussion with a potential employer or an official of the Employment Service, the following Job Development Contact Sheet was completed.

TUSKEGEE INSTITUTE EXPERIMENTAL AND DEMONSTRATION PROJECT

Job Development Contact Sheet

____
Job Development Officer(s)

____
Date

1. Name of Person Contacted: ________________________
   Address: ________________ Telephone: ____________
2. Title of Person Contacted: ________________________
3. Firm or Organization: ________________________
   ____
4. Summary of Discussion:
   A. Placement--Potential Number: ________________
      Trades: ________________________
      ____
   B. Potential Date(s) for Employment: ________________
      ____
   C. Salary Discussed: ________________________
      ____

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D. Additional Information Requested by Potential Employer:

____

____

5. Action Recommended: ______________________________

____

____

. . . .

To be Filled in by Job Development Officers

6. Action Taken:

A. Persons Assigned for Job Interview: ________________

____

B. Date Personal Data Sheet was Sent: ________________

In addition, the personal data sheet appearing below was prepared on each trainee for distribution to potential employers and to Employment Service officers in the State. These sheets served three purposes: First, to give pertinent data concerning the trainee; second, to give an evaluation of the trainee's performance in his trade and academic work; and third, to give an evaluation of character traits that the trainee had exhibited over the past twelve months while in the program.

EXPERIMENTAL AND DEMONSTRATION PROJECT

Tuskegee Institute, Alabama

PERSONAL DATA FORM

Date: ______________________

Area of Training: ___________

Name: ____

Address: ____

Telephone No.: _____________________________________

Age: ____

Marital Status: ____________________________________

No. of Children: ___________________________________

Military Service: Yes ( ) No ( )

Educational Background: ____________________________

____

Special Training: __________________________________

____

Academic and Trade Ratings:*

(Ratings are based on teacher evaluation of trainees according to their application, participation, quality of performance, industry, initiative and responsibility.)

1. English ( )
2. Math ( )
3. Trade ( )

*Rating Legend: Superior-5, Above Average-4, Average-3, Below Average-2, Unsatisfactory-1.

Personal Characteristics Rating:*

1. Honesty ( )
2. Punctuality ( )
3. Respect for Authority( )
4. Concern for Others ( )
5. Physical Fitness ( )
6. Personal Appearance ( )

Counselor's Evaluation: ______________________________

____

____

Although it was found that the personal contact method was effective in obtaining immediate action relative to placing a few trainees with employers in Alabama, the percentage has been small and very disappointing.

Surprisingly, to date no placements have been made through the Alabama Employment Service.

Since the job development officers were unable immediately to develop an adequate number of jobs in the State of Alabama for the one hundred and sixty-six trainees, it was apparent that jobs would have to be developed outside the State.

Prior to leaving the MDTA Program, each trainee was requested to fill out the following form. This form indicated the area in which the trainee would like to live and work if employment were not found in the State of Alabama. Using this as a guide, it was possible to plan and implement a job development itinerary. Thus far, jobs have been developed in Georgia, South Carolina, North Carolina, Virginia, New Mexico, New Jersey, New York, Illinois, and Michigan.

TUSKEGEE INSTITUTE

THE EXPERIMENTAL AND DEMONSTRATION PROJECT

MDTA - ALABAMA 211

Information Sheet #2

Name ______________________________
Last First

Shop ______________________________

Date ______________________________

Directions: We are asking you to complete this form in an effort to help us determine how we can best assist you in the area of job placement when your training here will have been completed. Please answer each question truthfully and completely. Place a check mark in the box opposite the answer of your choice.

1. When your training in this project ends do you plan to leave the community in which you live:

   a. ☐ Yes (If answer is yes, where do you plan to move?)
      1. ☐ To another community or city in Alabama (Tell where)
      2. ☐ To another city in another state (Tell where)
      3. ☐ Not sure where I want to go
   b. ☐ Not too sure
   c. ☐ No (Briefly tell why)

2. If a job for you could be found in another city or state would you be willing to move to that city or state?
   - a. ☐ Yes
   - b. ☐ Not too sure
   - c. ☐ No (Tell why)
3. If you had a chance to choose your place of employment, where would you like most to work?
   - a. ☐ In my present community
   - b. ☐ Somewhere in Alabama other than where I now live (Tell where)
   - c. ☐ In another state (Tell where)
   - d. ☐ In another country (Tell where)
4. If employment for you cannot be found in the place of your first choice, in what two other places would you like most to work? List in order of preference.

B. The Interview

In most cases, it was necessary to arrange an interview between the potential employer and the trainee following a job development contact. Therefore, it was necessary to contact the trainee at his home by telephone, telegram, or letter, depending on the date scheduled for the interview.

Trainees who lived in close proximity to Tuskegee were picked up at their homes and taken to the interview. Others who lived at distant locales were instructed to meet the job development officer at an appointed time for the interview.

It was very rewarding to observe the skill in which the majority of the trainees handled the interview. In the concluding months of the MDTA Program, special emphasis had been placed on this skill (The Interview), as well as how to make application for and filling out the application form in applying for employment.

However, we also discovered that few trainees had not adhered to our counseling about the importance of one's attitude during the interview. Usually this type of situation ended with the trainee being too loquacious or too mercenary before he had secured the job.

For example, on one of our job development appointments, the potential employer requested that we bring two trainees to be interviewed. He selected the ones that he wished to interview by scrutinizing the personal data sheets. He selected trainees #43 and #48. Trainee #43 was rated first in his trade area, a high school graduate and was twenty-seven years old. Trainee #48 was rated fifth in his trade area (out of the top twenty-five), had completed the sixth grade and was forty-five years old. Both trainees were interviewed two times by the owner-manager and the foreman at separate times. They were equally impressed by the superior intellect of trainee #43. They were also aware that his knowledge of scientific mechanical information surpassed that of trainee #48, but they had questioned his real interest in the job because he had constantly emphasized the monetary aspect of the job throughout the interview. Needless to say, trainee #48 was hired because of his attitude. Consequently, this experience proved to be the "shock therapy" that trainee #43 needed. After several weeks of trying to find employment on his own unsuccessfully, his attitude changed. We have since been able to place trainee #43 with this same company. He appears to be adjusted. The employer has reported that he is working out well and his attitude shows a decided change.

As soon as an employer agreed to employ a trainee, he was requested to complete the following Job Placement and Certification Form.

TUSKEGEE INSTITUTE EXPERIMENTAL AND DEMONSTRATION PROJECT

Job Placement and Certification Form

____________________ Job Development Officer(s)   ____________________ Date

____________________ Name of Employee   SS# ____________________

Date of Placement ____________________

Address of Employee ____________________ Telephone ____________________

Place of Employment ____________________ Firm or Organization ____________________

Name and Title of Employer ____________________

Type of Business ____________________

Job Description of Employee ____________________

____

Pay and Allowance of Employee ____________________

Date Employment Begins ____________________

Date Referred to Relocation Officer ____________________

Mobility Status ____________________

Certification of Employment by Employer

This is to certify that ______________________ SS# _________

will be employed by our firm ______________________________ with a

beginning salary of ____________ per week or month as of ________ 1965.

L.S. ________________________________
Authorized Employer

________________ Date

________________________________ Title

This form, in addition to giving the Job Development Office pertinent information about the job, also gives information vital to the Labor Mobility Office in cases where mobility is needed.

C. Job Placement

The following table shows the number of percentages of trainees in each vocational area who are presently placed.

Trade Area	Total Enrollment	No. Placed	No. Unplaced	% Placed	% Unplaced
Brickmasonry	48	38	10	79	21
Carpentry	38	33	5	87	13
Farm Machinery	36	20	16	56	44
Meat Processing	44	30	14	68	32
Total	166	121	45	73	27

Early in the job developers' effort to locate jobs for trainees it was discovered that some had found employment on their own. To expedite time and effort in locating trainees for jobs, the following letter was sent to all trainees whose employment status was unknown:

Dear Mr. ________

In order to keep our job placement records up-to-date, we need to know your present employment status. This information is necessary because some of the trainees have found jobs on their own and are already working.

Placements are continuing to come in and we do hope that before too long all trainees will be placed. However, we do not want to place a man who already has a job; this time and effort can be used to place those who are not working.

Will you please answer the following questions and return this letter to us in the enclosed self-addressed envelope by return mail.

Yours very truly,

Job Development Officer

1. I am working. ( ) Yes ( ) No.
2. I have a temporary job, but want to be placed by Job Development Office. ( )
3. Name of company or firm (if permanent employment) ____________________

____

4. Name of employer ______________________________

5. Address of employer ______________________________

6. Rate of Pay: Per hour ________ Per week ________ Monthly ________

Of the 109 letters sent, at present we have received 91 responses. Although we have suggested to our trainees that they remain in Alabama until jobs can be located for them, ten have left the state and sought jobs on their own.

D. Follow-Up

The follow-up services began simultaneously with the job placement.

The objectives of the follow-up services are as follows:

1. To maintain direct contact with the trainee who had been placed on a job.
2. To help establish better employer-trainee relationships.
3. To help the trainee adjust to his new vocational and social environments.
4. To determine what effect the MDTA Program has had on the trainee's adjustment to his new vocational and social environments.
5. To determine if there is a positive correlation between the evaluations of trainee while in MDTA training and his job performance on the job.

Before the trainee reported to his job he was requested to come back to Tuskegee for pre-job counseling. If this was too inconvenient, the Job Developers or the Counselor arranged to be present at the location of the job to give pre-job counseling.

During the pre-job counseling session, the trainee was instructed to contact the Job Development Office if he needed additional assistance in getting adjusted to his new job.

After a period of two to three weeks a contact was made with the employer by telephone or letter to determine the trainee's adjustment to the job. The employer was informed that at a later date a follow-up visit would be made. The majority of the employers were receptive to the idea and usually suggested a time for the follow-up visit. They appeared to welcome this type of discussion and assistance from the MDTA Program. Most employers agreed that there is a need for on-the-job counseling.

The following form is used to record the information given by the employer during a follow-up interview:

EXPERIMENTAL AND DEMONSTRATION PROJECT
TUSKEGEE INSTITUTE, ALABAMA

Follow-Up Form
Employer's Report

Establishment ______________________________ Date ______________

Address ____

Employee's Name ____

Person Interviewed ______________________ Title ________________

Please rate this employee according to personal characteristics and job performance.

Personal Characteristics

A. Honesty ( )
B. Punctuality ( )
C. Respect for Authority ( )
D. Concern for Others ( )
E. Physical Fitness ( )
F. Personal Appearnace ( )

Job Performance

A. Application ( )
B. Response to Work Assignment ( )
C. Performance and Quality of Work ( )
D. Industry ( )
E. Initiative ( )
F. Responsibility ( )

Comments: ____

____

____

Interviewer's Signature ______________

Rating Legend: Superior - 5, Above Average - 4, Average - 3, Below Average - 2, Unsatisfactory - 1.

In addition to the follow-up visit to the employer, one is also made to the trainee. All follow-up contacts with the trainee are made after the work day is completed. This type of visit serves two purposes: (1) It does not interfere with the trainee on the job, and (2) it gives us an opportunity to visit with the trainee and his family in his home.

The following form is used to record information given by the trainee during a follow-up interview.

EXPERIMENTAL AND DEMONSTRATION PROJECT

TUSKEGEE INSTITUTE, ALABAMA

Follow-Up Form

Employee's Report

Name ______________________________ Date _______________

Address ____________________________ Phone _______________

Place of Employment ____

Job Specification _______________ Hours per Week _______________

We are asking you to complete this form in an effort to determine how you are adjusting to your new job as well as to find out how we can be of assistance in helping you make the best adjustments possible. Please answer each question truthfully by placing a check mark ( ) opposite your choice.

1. How do you enjoy your work?
   - ( ) a. Very much
   - ( ) b. Not too much
   - ( ) c. Not at all

2. What do you like most about your job?
   - ( ) a. Pay
   - ( ) b. Working hours
   - ( ) c. Supervisor
   - ( ) d. Co-worker
   - ( ) e. Other (specify)

3. What do you like least about your job?
   - ( ) a. Co-worker
   - ( ) b. Pay
   - ( ) c. Supervisor
   - ( ) d. Working hours
   - ( ) e. Other (specify)

4. Do you think that you have enough training to work effectively on your job?
   - ( ) a. No, definitely could use more training
   - ( ) b. Not too sure, possibly could use more training
   - ( ) c. Yes, training is sufficient for present job

5. What is your weekly salary?
    - ☐ a. $40 - $59
    - ☐ b. $60 - $79
    - ☐ c. $80 - $99
    - ☐ d. $100 - $119
    - ☐ e. $120 - $139
    - ☐ f. $140 - $159

6. How do you get along with your employer?
    - ☐ a. Very well
    - ☐ b. Fairly well
    - ☐ c. Not too well
    - ☐ d. Not at all

7. How do you get along with your fellow employees?
    - ☐ a. Very well
    - ☐ b. Fairly well
    - ☐ c. Not too well
    - ☐ d. Not at all

8. Has your job helped you improve your living conditions?
    - ☐ a. No, having difficulties in making ends meet
    - ☐ b. Somewhat, things are a little better
    - ☐ c. Greatly, can meet obligations and provide a better living for family

9. What per cent of your weekly salary do you save?
    - ☐ a. None
    - ☐ b. 5 - 9%
    - ☐ c. 10 - 14%
    - ☐ d. 15 - 19%
    - ☐ e. 20 - 24%
    - ☐ f. 25 - 29%

10. What are your future plans?
    - ☐ a. To remain on job
    - ☐ b. To leave job for better position
    - ☐ c. To leave job for additional training
    - ☐ d. Undecided

The job development effort has met with a degree of success at this point. However, it is strongly believed that this effort would have been greatly enhanced if job development activities could have started at least six months prior to the completion of the training phase of the project. It would further facilitate matters if the job development staff were expanded so that sufficient attention could be given to the wide area of territory necessitating coverage.

Preliminary reports from the job development counselor indicate that the majority of the trainees presently employed are performing their duties satisfactorily and are adjusting with relative degrees of smoothness to new job environments as well as new living areas.

Presently, the job developers are working to obtain placements for trainees who are not yet employed. Special emphasis is being given to the area of Farm Machinery since placement of trainees in this area has been slower than anticipated. However, present negotiations indicate that a number of placements in this area will be forthcoming.

SUMMARY

This project was designed to train a sample of culturally deprived male heads of households in Alabama. For purposes of this project, training included vocational skills (brickmasonry, carpentry, farm machinery, and meat processing), academic skills (mathematics and English), and counseling, (individual, group, and family).

The objectives as set forth necessitated very intensive teaching and counseling since nearly all the trainees were functioning at or below the eighth grade and were being brought into an environment which was alien to anything they had experienced before. Several new innovations had to be developed to hold the trainees and spark their interest. Firstly, every member of the administration and staff had to be able to empathize to the degree where the trainee recognizes that someone is interested in him and his problem. Secondly, there was the difficult task of making each trainee into a better person before he leaves the program. He had to be taught a marketable skill to the point where he was proficient at it and he had to be refined to the point where he could live and work with others in different and strange environments. This assignment was a difficult task to accomplish in fifty-two weeks, but it was done and today the majority of the men are employed.

Some of the significant actions taken in accomplishing this task were as follows:

1. Residential Patterns.--Fifty per cent of the trainees lived on the campus while the other 50 per cent commuted. Resident trainees,

for all practical purposes, were treated with tender loving care on the campus until they were completely absorbed into the extra-curricular activities of the college. It was impossible to make the college a home away from home for them because their homes were so far below normal; however, they got an insight of a better life and all showed signs of improvement in terms of personal habits and aspirational levels. In addition, the resident trainees performed significantly better at the 5 per cent level than did non-resident trainees.

Non-resident trainees were more difficult to work with; they were absent more often than resident trainees, they showed less regard for personal characteristics and they had more problems. While Volume II, which will treat the research aspect of the projects, will explore this area further, it might be well to mention here that indications are that when and where feasible projects of this nature should have all trainees in residence.

2. Homogeneous Grouping.--Trainees were grouped according to their learning potential. This action was taken for many reasons, among them were the fact that the bright ones would not get a chance to embarrass the dull ones in class and they could progress at their own pace in terms of learning.

3. Coordination of Academic Skills with Vocational Skills.--Special English and mathematics courses were designed for each vocational skill. For example, trainees enrolled in carpentry speak the language and work the mathematics unique to carpenters and the same

is also true for all other areas. From our experiences, this procedure is greatly advantageous in reducing absenteeism and creating interest on the part of the trainee. The trainee recognizes that for every day he misses class, he is missing something which is directly related to his vocational skill. In addition, nothing is taught to the trainee in abstract form in that he is able to relate every day's activities in the classroom to every day's activities in the shop, and this, in our opinion, is partly responsible for the very low attrition of 8 per cent in this project.

4. Teaching Technique for Poor Readers.--The poor readers had their reading taped and played back to them. They were able to identify their own errors and correct them. After a period of three months, 60 per cent of those that were classified as poor readers were reading as well as the average reader in the group.

5. Medical Care.- This project brought to light the importance and the continuing necessity for medical care of the trainees. The experiences gained in this project indicate that lack of medical care for the trainees could bring about partial failure of the project.

6. Community Involvement.--Community leaders contributed greatly to the overall development of the trainees. Every Friday, outstanding leaders from the community as well as the state and regional offices came in and gave a one-hour lecture to the trainees. A wide variety of subjects were covered and there was no lecture where the trainees did not display some interest and ask many questions.

7. Development of Teacher Evaluation Instruments.--Every conscious effort was put forth to develop an objective evaluation instrument which was meaningful to potential employers and which could fit into the research design. This instrument, which appears in Appendix 2, is now being adopted by several training projects in Alabama. The instrument was given to the training supervisor of the Alabama Department of Vocational Education, who expressed an interest in adopting it for other projects in the state.

8. Counseling.--Probably this was the most challenging phase of the entire program. Counseling was done on every conceivable problem with which a culturally deprived person could be plagued. There were times when trainees seemed to think that they could not continue a day longer; there were times when all the trainees seemed to think that all the world was against them. Up to today, it is doubtful if all understood why they could not be excused to participate in the Selma to Montgomery Civil Rights March. Counseling is an elusive profession and the results are not always readily evident; however, it is the conviction of the investigators that effective counseling was primarily responsible for holding the project together and bringing it to a successful completion.

Having completed the training phase, the next important job was to place the trainees on jobs where they would be given a fair chance. To date, 121 of the 166 trainees have already been placed. Wages range from $1.35 per hour in meat processing to $4.25 per hour in brickmasonry. Placement has been comparatively slow among farm machinists, but those that are placed are doing exceptionally well. But for the forty-five trainees yet to be placed, it is the opinion of the writers that the program has achieved its demonstrational objectives.

Volume II, which subsequently will be submitted, will treat the experimental phase of the program in its entirety. As of now, half the data has already been processed by the Tuskegee Institute Computer Center. It is anticipated that the remaining portion will be made available at an early date.

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